mental health digest

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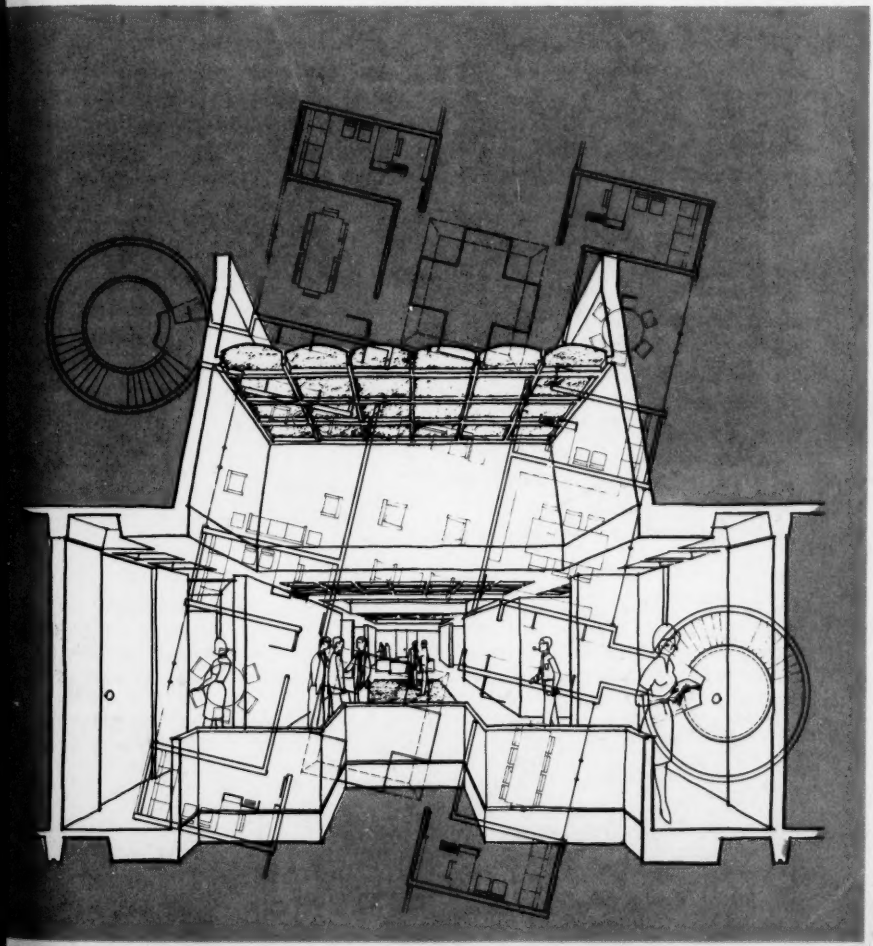

cover story

Planning a Community Mental Health Center

"The design of a center requires the skills of architects who understand the services of the center and who then can create the forms to fit the functions. As the functions are not traditional, indeed they constitute, as President Kennedy described hem a a 'bold, new approach,' so the orms will not easily fall into any traditional mold.

The design of a center requires that both the mental health professional and the architects understand the nature of the community and its process of organization. The community mental health center, to deserve its name, cannot sit as a thing apart from the community it is designed to serve."—Bertram S. Brown, M.D., Director, National Institute of Mental Health.

The first digest in this issue describes the major features of the physical planning of a community mental health center.

mental health digest

The *Mental Health Digest* is a monthly publication designed to reflect the whole spectrum of mental health and to present a broad sampling of scientific subject matter and professional points of view. It contains condensations of material selected from the current mental health literature. The condensations are published with the approval of the authors and publishers for use in the *Mental Health Digest* only.

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Mental Health Facilities: A Model for Physical Planning

MAYER SPIVACK and HAROLD W. DEMONE, JR.

Considerable emphasis has been placed on the importance of *social planning* in mental health. We will discuss the major features of *physical planning*. We urge that a comprehensive planning unit be established as a staff service to the director of every large State, county, or city mental health authority. A section concerned with physical planning should be directed by a full-time professional physical planner.

The physical planning unit should coordinate and supervise all physical and temporal planning activities in each new or renovated mental health facility. It should provide consultation services to the mental health authority and to its satellite facilities, such as mental hospitals, community mental health centers, and child guidance clinics. It should provide instruction in physical planning to people engaged in all levels of planning. Sufficient personnel should be employed on a full-time consultative or contract basis to enable the planning section to solicit the active interest and participation of all individuals and agencies concerned in community mental health planning efforts. The section should notify relevant individuals and agencies of their respective roles in a project in sufficient time to allow such projects to be expedited smoothly. The areas which the section must coordinate and supervise include the following, in the order listed:

Comprehensive and long-range planning.
  Budgetary planning.
  Legislative involvement.
Project planning.
  Communications and community organization.
Statewide site location studies.
Site selection.
Complete administration of architect selection procedures.
Architectural contract administration, management. Consultation to and free dialogue with architects and their local clients (staff of future facility) during all phases of architectural work.
Architectural programing research.
Site planning studies.
Schematic drawings.
Preliminary design studies.
Final design drawings.
Working drawings.
Review and release of construction contracts and schedules.
Construction and on-site design modifications.
Establishment of maintenance standards, schedules and procedures, and their supervision.
Evaluative research review and feedback.
  Continued research.
  Review and feedback.

These steps must be performed in this order to provide adequate lead time for all personnel involved in the planning. Each step must provide information to support the step which follows.

Selected procedures will now be discussed in more detail.

Comprehensive and Long-range Planning

Budgetary planning—The unit should provide and coordinate development plans for every facility under the jurisdiction of the department of mental health. This includes the existing facilities as well as planned new facilities. It should draw up capital expenditure projections for a minimum of 5 years. These projections should be available for reference on a State-wide basis. Although the budget projection is flexible and

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predictive, it should be held to realistic proportions and adhered to as closely as possible in the planning of real-time projects. Such plans are especially needed where local areas are in competition for the development of new facilities. Such planning demands a continuous evaluation of needs and resources available to populations across the State.

Project Planning

Communications and community organization—It is to be expected that the planning section will have been working with the community before the architectural contract is awarded. The physical planners will have responsibility to work with neighborhood groups and residents near the site of the new facility. In community mental health center construction, it will be helpful to invite the community to participate in the planning of the center, to define its own needs, and to become early and thoroughly involved. There is evidence that intensive community involvement aids in the acceptance of the project and contributes to its success.

Site planning issues frequently arise in contiguous areas at the same time. It is not unlikely that mental health centers will be in planning stages at the same time as nearby structures. Early and frequent communication between all site planners should be established.

The destruction of homes will inevitably affect community relations negatively unless acceptable replacements are provided. Public agencies must take great care to insure that their actions are seen as beneficial and that their political power and use of legal force is exceeded by their good will and discretion.

Community mental health center program directors and the program director for any building should be hired as early as possible. Deterrents to early hiring of a director should be remedied by a reexamination and recasting of the legislative requirements and obligations imposed upon the commissioner of mental health with regard to the hiring of the staff.

State-wide site location studies—The rational choice of the best location for a new structure should be based on an analysis of community and regional needs and their existing and proposed services. Such issues as population density, social ecology, etiology, public transportation patterns, community image and identity, and location of other care-giving facilities must be dealt with.

Site selection—When a community has been chosen to receive a facility, planning efforts to select a site within that community must be initiated. The criteria which bear upon optimum site location are best evaluated collaboratively by the architects, mental health specialists, site planners, physical planners, and representatives of the community. Such decisions are not simple, and may properly be the subject of a sophisticated analytical study. It is recommended that a location committee be formed from these groups to study site location criteria and solutions, and to make a recommendation as to three alternative site locations, listing their respective advantages and disadvantages. This service may also be obtained from many architectural and planning firms.

Land cost should not be a prime consideration. Obtaining cheaper land from public agencies in preference to better located land from other sources, or purchasing small and inexpensive parcels of land to save a few thousand dollars, may limit the effectiveness of the larger investment in the physical plant and

treatment services. Such savings fall into the category of false economy.

Architect selection—The design methods and sequences will require architects of more than average sophistication and ability. Not all architects eligible to design State-owned buildings will be willing to adhere to this structural design process. Mental health treatment buildings are complex and extremely subtle in their effects upon therapeutic efforts. Conventional architectural practices have produced many poor buildings—buildings which do not assist the staff or allow the patient dignity, identity, or freedom.

Competitions for the best design are not suitable, because the building cannot be designed without attention to the program document which will not exist that early in the planning sequence. It is recommended that architects be chosen by interview and by site visit evaluation. A tour of buildings designed by that firm and discreet interviews with the administrators and occupants of those structures should be conducted. The interview panel should include recognized architectural educators who also have had their own commercial practice and/or highly competent practitioners. The balance of the panel should include individuals from the local professional community.

Architectural contract supervision—The relationship between a contracted architect and the mental health authority and other government department clients should be reformulated more sympathetically and liberally, with more attention to the objectives of producing a satisfying human environment. Architects should be encouraged to produce designs which improve the quality of life and esthetic conditions surrounding users, especially at mental health facilities, where a good environment may be considered to weigh heavily in the balance between emotional health and emotional sickness. The criteria used by governmental authorities to evaluate architectural plans and construction programs—initial cost and administrative efficiency—must be deemphasized. Procedures surrounding the financial administration of architectural and construction contracts should be simple and clear. Legislation and administrative procedures should be simplified and rationalized so that the decision sequence requirements of different planning and construction tasks are met.

Although architectural fees and construction costs must remain a factor, they must be weighed realistically against the social costs and social utilities inherent in environments of high or low quality. An environment which provides a high degree of satisfaction in living and working may save thousands of dollars in employee job continuity and productiveness. There is reason to believe that a high quality environment can contribute to rehabilitation of the mentally ill, with subsequent social and financial savings.

Architectural programing—The rational architectural design of complex structures housing diverse functions demands the services of a design specialist whose efforts are devoted to articulating the building's physical, spatial, functional, and "esthetic" requirements. He is obligated to understand the needs of his clients in great depth. The individuals who work in each area will be in a unique position to help the architect to fit the form of the structure to the circulation patterns, space requirements, and atmosphere of the functions it must house.

Buildings designed without this

minute analysis are often less than optimum in performance, and frequently require postconstruction modifications. Without a program for design furnished by the clients, an architect must provide a program for himself, or begin by trial, argument, and error. The latter course is the too frequent choice; many poor buildings have been designed this way. If the firm chooses to provide its own program, it will be at the expense of 6 months to a year of lead time before construction is due to begin. The writing of a program document should be funded separately as a first stage in a series of design stages.

Funds should be made available to secure the services of the architect as a program planner. His function and obligations would be to furnish a written program covering the following categories:

Purpose to be achieved by those using the building.

Implications of purpose for location of structure, site planning, and architecture.

Individual program elements which make up the general program? How many separate staff and personnel functions must be considered? How are they related to each other? What are their individual architectural requirements?

The programer should perform the following sequence tasks for each separate area to ensure that the full range of functions have been considered in detail: Organization of all personnel into committees whose job it will be, in collaboration with the programer, to consider the environmental characteristics, qualities, and objectives needed and desired for their own area of the new structure. A typical schedule of topics should include:

1. Function and purpose of specific area being considered.
2. General statement of environmental objectives, characteristics or qualities to be met in the new design.
   a. furniture to be used and possible groupings in behavior settings.
3. Detailed description of environmental objectives, etc., in terms of:
   a. circulation patterns
   b. location requirements within the "system" of the building
   c. number of individuals using the area
   d. social or professional relationships to be encouraged
   e. sensory qualities of spaces (acoustics, illumination, etc.)
   f. air movement problems (such as originate in kitchens, laboratories, etc.)
   g. desired "feeling tone" of the space, i.e., whether openness, control, freedom, informality, or formality, etc., are desired.
   h. time span or time use of area—will there be 24-hour continuous use of the space or will the building be closed for portions of time? Will there be significant subdivisions of time in the "on time period"?
   i. kinds of surfaces, textures, materials needed for the area
   j. auxiliary functions associated with area, i.e., janitorial needs, policing, parking, etc.
   k. possible future needs for expansion and/or physical change
   l. specialized utility installations for equipment or processes which require such installations
   m. room volumes in cubic feet
   n. floor area requirements in square feet.

In the role of a mediator and catalyst to the architect and his client, the programer will aid in evolving explicit design goals and help rearticulate and reformulate the objectives of the client with respect to a new structure. It is the obligation of the programer to organize this material into narrative with illustrative flow diagrams. To ensure full communication of the program document, the programer must follow through collaboratively with the architects as a design consultant until the completion of the work.

The programer must provide a written and illustrated postconstruction analysis of the building within 1 year of its opening. Analytical exam-

ination of a building, in the light of the goals made explicit in the hypotheses and performance specifications of the program, is the best way of evolving improved structures for the future.

Site planning—The mental health authority, or planning unit, should obtain the services of professional architectural site planners simultaneously with the hiring of the programer. Site planners should be hired at the same time as the architects' contract is let. The site planners and the architects should confer with the mental health center personnel in the dialogue with the architectural programer. In the siting and planning of new structures attention must be paid to the following: Site topography, future expansion program, zoning requirements, utilities, climate and micro-climate, acoustics, landscaping, access, internal circulation, relationship to existing facility, relation to local and immediate neighborhoods.

Review and release of construction schedules—Tightly drawn and realistic planning and construction schedules should be provided for every mental health facility planning project. Schedules should be planned by collaborative effort, specifically for each new project. Construction contractors should use critical path techniques in the planning of construction schedules and sequences for optimum performance.

Construction and on-site design modifications—In this phase the architect and the client frequently tour the facility under construction. This is the time for last-minute detail changes.

Maintenance standards and schedules—Buildings constructed of high quality new materials will require regular maintenance procedures. Formerly mental health treatment facilities were constructed on the hospital model and subjected to antiseptic scrubbings and hosings. Patients are no longer as frequently incontinent or destructive of their environments. There is no longer need for patient-proof structures designed for ease of maintenance. The tradition in which maintenance standards dictated the building design (i.e., the structural tile in most mental hospitals) must be reversed. The building requires maintenance to keep the quality of the environment at its optimum level for the benefit and pleasure of the staff, patients, and visitors.

There must be collaboration between the standards setting and the inspection program of the mental health authority. As the array of mental health services becomes a complex web of interrelated public and private programs, the standard setting responsibility of the mental health authority will increase.

Evaluative Research Review and Feedback

The planning unit should reassess its basic physical design and planning objectives with respect to changing treatment patterns in community mental health, public health, and psychiatric practice at 5-year intervals. Out of this reevaluation process the planning section is expected to publish planning, architectural, programing, construction, and design guidelines for future contractees.

Soon after the completion of each project, the planning section should publish an evaluation of the quality and success of the project. This feedback can be used as a basis for recommendations of future design objectives, for the development of prototype designs, and as the basic data bearing upon the rational reassessment of physical design objectives as spelled out earlier.

The planning section should function as a central clearinghouse, screening and evaluating all renovation and construction plans. Consideration should be given to the "intangible aspects" of design quality and environmental quality in all plans. The director of planning should have final power of acceptance or rejection in cases of dispute. The same services of planning and design review should be made available to all private and public mental health agencies where requested.

The planning section should organize a continuously interdisciplinary committee composed of directors of State-run facilities, planning section personnel, other State level administrators and consultants, and other individuals from public and private agencies who wish to participate. The objective would be to draw up recommendations for planning and design policy on an annual basis as a result of evaluative data and on the basis of the best available information from research. The director of every State-operated or sponsored mental health facility should attend this seminar or send his representative. The charge of this seminar is to provide the information and dialogue for the work of the committee in the following year, and to generate alternative approaches to planning and design and to evaluate alternative and experimental models of new mental health facilities.

The planning authority should keep an updated file of all mental health facility planning documents produced in the State. Copies should be available to all community agencies, mental health personnel, architectural programers, architects, and State contractors. The planning authority should publish pamphlets and instruction aids on aspects of mental health facility planning for the guidance of mental health and architectural professionals, community agencies, and contractors. The unit should publish information which spells out the desirable and required steps and procedures for the optimum performance of tasks related to mental health facility planning. There should be a research section, which investigates theoretical and practical aspects of the effects of physical environment variables upon the effectiveness of mental health treatment programs and upon the ecological states and behavior of staff, patients, and clients.

Teachers as Psychotherapeutic Agents for Withdrawn Children

Bernard G. Guerney, Jr. and Audrey Bach Flumen

It has been stated that the only way to make substantial changes in the mental health of our adult population a generation from now is to devote at least 75 percent of mental health resources toward helping children now.

School is where the children are. Yet the shortage of mental health professionals in the schools is acute. The most frequent complaint from school psychologists is that they are so burdened with diagnostic duties that they have no time left for therapeutic efforts.

Those who are concerned with the shortage of mental health professionals are suggesting that professionals should expand that portion of their role which has to do with educating the public—spreading principles and practices promoting better mental health.

Perhaps no vocational group is more important and influential in this sense than teachers. We advocate that school mental health workers broaden their therapeutic impact on school children by conducting programs of in-service training for teachers. Among other things, this could involve a program of training teachers in appropriate therapeutic skills so that they can provide psychotherapeutic help for deviant children from their own classrooms under the supervision of a professional.

Because professional therapists are essentially strangers to children, they must spend months establishing an emotional importance to the child—which is difficult when the therapist has no other role-relationship which makes him important to the child, and when he sees the child for only 50 minutes each week. The teacher, by contrast, is the child's symbiont. He is with the child up to 30 hours a week. Every move he makes during that time has an impact on the child. The teacher's actions help form the child's concepts of how authority figures behave and how adults regard him; they serve as a model for his own behavior and mold his self-image. The reverse is also true: the child plays an important part in determining the daily, moment-to-moment comfort-discomfort, anxiety-contentment, happiness-unhappiness status of the teacher. The child is continually helping to determine the teacher's self-image as a competent or incompetent teacher and as an adequate or inadequate person. The teacher pays for every mistake he makes in relating to a child more immediately than a professional mental health worker does. Conversely, the rewards for correct and remedial actions are more quickly seen and enduringly felt. If things are being handled badly, this symbiotic relationship makes things more terrible for both parties than they could ever be in a child-therapist relationship. If the teacher can be trained to reverse such a situation, the result can be more rewarding for both child and teacher.

In the traditional treatment method changes in the child's behavior (e.g., greater assertiveness) which may be considered desirable from the therapist's standpoint could be misunderstood—undermined—by the teacher. When the teacher is the ther-

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apeutic agent, he will not fail to understand and appreciate therapeutically desirable changes.

But are the roles of teacher and therapist compatible? Granting that teachers have strong motivation to help, will their teacher role allow them to do so? What one hopes, and what clinical experience indicates does happen, is that parents and teachers have the capacity to learn a new role in a new situation, when asked to do so for a limited period of time. As their experience and belief in what they are doing grow, they begin to apply the new role behaviors, where and when appropriate, in their daily lives. Once this happens, the time and effort spent by the therapist in his training efforts can be expected to pay handsome dividends. Over the years, hundreds of ordinary as well as disturbed children may gain from the therapeutic attitudes and behaviors which the teacher has incorporated.

Ultimately, this polemic should be resolved by empirical research. Research has demonstrated the efficacy of the behavior modification approach used by teachers for certain problems of children. The present research differs from previous investigations in most of the following ways: the teachers utilized client-centered, rather than behavior modification, techniques; this study was conducted in an ordinary elementary school with children from regular classrooms; the children were beyond nursery and kindergarten age; the teachers carried on their therapeutic efforts outside the classroom; excessively withdrawn children were the recipients of the teacher's efforts; a control group and statistical tests of significance were used in demonstrating effectiveness; and the relationship between the adequacy of the teacher's role performance and degree of child's improvement was assessed.

The hypotheses were:

Withdrawn children would become more assertive in their classrooms when seen in therapeutic play sessions by their own teachers.

The degree of improvement would be correlated with the adequacy with which the teacher played his client-centered therapeutic role. If improvement were found, such a correlation would suggest that the nature of the sessions rather than the extra attention per se was responsible for the improvement.

Subjects—The children (eight boys and seven girls) were from first, second, third, and fifth grades. They were selected on the basis of the teacher's evaluation of the children's failure to communicate with other children, lack of interest in the classroom, and an unfulfilling approach to school. Each teacher nominated two such children from her class, one of whom was randomly assigned to the Control group (C), and the other to the Experimental therapy group (E). The C group was used to account for changes in behavior that might be due to factors other than the special sessions (e.g., teachers' general classroom techniques, peer influences, or maturation). Before the end of the study, several nominated children were eliminated for various reasons, including changing schools, parents not submitting written approval, and children not showing withdrawn behavior in accordance with the set criteria (fewer than 20 assertive responses per 65 minutes) when their classroom behavior was observed. In the final analysis, children from nine of the eleven teachers were included, with a total of nine children (four boys and five girls) in the Experimental group and six

(four boys and two girls) in the Control group.

Classroom coding—The system coded four types of assertive behavior.

1. Initiating talk in class. This consisted of speaking out in class. Initiation was crucial; being called upon without volunteering did not count.
2. Raising hand in attempt to initiate talk. Raising a hand in response to a "How many of you . . .?" type of question did not count.
3. Initiating talk with another student.
4. Initiating talk privately with teacher.

The interval for coding was 15 seconds. That is, only one initiation in each category could be scored during 15 seconds. An activity continuing over several 15-second intervals was scored once for each interval.

Since the children were working with the teacher in a more relaxed atmosphere, they would be expected to be more at ease and more verbal. However, a more important goal of the treatment was for this disinhibition to generalize to the child's interactions with others, in addition to the teacher.

The coders, introduced to the children as "students learning to be teachers," were four college seniors. During their training they observed children in the classrooms for 4 weeks. For practice they were assigned one assertive and one withdrawn child to watch. The assertive children were watched for two reasons: to provide more frequent opportunities to code, and to provide a rough quantitative estimate of the assertive end of the withdrawn-assertive continuum. After practice, the coders showed excellent interjudge reliability.

After training, the coders coded the behaviors of the C and E child in a given class simultaneously for one 65-minute period each week. The observations were scheduled for participation periods rather than for seatwork time, and in such a manner as to maximize the uniformity of type of activity being observed from one class to another. Coders were not told which children belonged to the E and which to the C group.

Teacher training—Filial therapy procedures served as a training model for training the teachers. Eleven volunteer teachers (all women) from a public elementary school in New Jersey were trained. The teachers were paid for after-school participation in the training groups. Their training consisted of 20 weeks of 1½-hour group meetings covering: Rogerian theory underlying the play session technique; demonstration of individual play sessions with children by the professionals; and practice play sessions with children by the teachers, under observation and with supervisory feedback from the other group members and the professionals.

Therapeutic play sessions—Each teacher met with her child weekly for 45-minute periods for 14 sessions over 17 weeks. A substitute took over the classes.

The teachers were divided into two small groups which met with a professional once each week for group supervision and discussion. The first 20 minutes were devoted to observations of one of the teachers working with her child. This was followed by discussion of the sessions conducted during the week by all the teachers.

Teacher coding—Two play sessions of each teacher were selected at random in order to measure the proficiency with which each teacher was playing her therapeutic role. The

teacher was not aware of which sessions were being coded. They were coded on an Empathy Rating Scale, a 7-point bipolar scale which takes into account acceptance-rejection, allowing self-direction, and level of involvement with the child.

The results of the study were remarkably consistent. All nine E children showed a consistent pattern of rising assertiveness. Not one of the six C children showed such a pattern. The final average assertiveness score for the E group was in the middle range of the class, judging from the preexperimental coding wherein children at the high end of the withdrawn-assertive continuum were observed.

Such improvement would be encouraging if there were some indication that the assertiveness was not limited to interaction with the teacher, since such a change might be accounted for simply on the basis of greater familiarity and intimacy. Increased assertiveness vis-a-vis peers would indicate that some generalization had taken place, which in time would suggest some change in self-image and self-confidence. This type of change would be more likely due to the specific treatment method, and also would offer hope that the improvement would apply in other situations beyond the classroom.

Private initiation of talk with the teacher accounted for little of the change, while initiation of activities with peers was in fact the primary and steadiest area of change.

The teachers themselves were pleased with the purposes and with the results they achieved. Statements such as "This new role with children has made me try it on an individual basis in the classroom," and "I never expected such a change in George as there has been in such a short time," were common.

Research is needed to assess the degree to which such gains as the children showed in the classroom carry over to other life-situations, and the degree to which they are maintained in future years. More research is also needed to explore the possibility of using client-centered techniques directly in the classroom, rather than in a special playroom. The results leave little room for doubt that the possibilities of using teachers as psychotherapeutic agents deserves attention from a practical, as well as from a research, point of view.

The Response of Psychopaths to a Therapeutic Community

J. Stuart Whiteley

The Henderson Hospital is a 68-bed unit for the inpatient treatment of young people of both sexes who are described as psychopaths, sociopaths, personality disorders, or character disorders. Treatment is by means of a Therapeutic Community; prospective patients are referred by psychiatrists with no working commitment in the hospital, prison medical officers, and sometimes by probation officers and other social workers with the medical backing of a general practitioner. The Henderson Hospital can be seen from two points of view: as one of the models for a Therapeutic Community, and as a treatment center for "psychopaths."

For the purpose of this study all male discharges from November 1964 until late October 1965 formed the basic series of 122 consecutive cases. An attempt was made to contact and interview these cases 1 year after discharge and was successful in 64 cases. An extended survey sought to recontact all 122 cases 3 years after discharge, but again only 63 were interviewed although some contact was made with a further 12 and information was gained from criminal records and Ministry of Health Psychiatric Index records so that in all but 14 some data were available.

The very intensive Therapeutic Community is not suitable for every psychiatric category, and even when admission is restricted to the broad diagnosis of psychopath some selection is necessary. Selection has been by a group interview, but the procedure has largely been intuitive and often influenced by the prevailing mood of the community. The selection group is made up of representatives from the staff (psychiatrists, nurses, social workers, etc.) and elected members from the more senior patients (in the unit for at least 3 months). No patient with a definite diagnosis of psychosis, organic mental illness, or mental subnormality is considered, but various degrees of "neuroticism" are common.

Of the 122 patients, 87 had a previous history of convictions, 66 had had previous psychiatric hospital admission (sometimes to Henderson), 43 had a history of both previous convictions and previous psychiatric admissions, and 12 had neither. Those with previous psychiatric admissions only numbered 23.

A psychological study of all admissions to Henderson showed that, in contrast to what is usually described in psychopathy, the type of patient admitted to Henderson was an anxious, emotional, socially isolated, apprehensive, and somewhat imaginative personality.

Of the 122 consecutive discharges, 72 relapsed in the 2-year period of followup in that they had either a conviction or a further psychiatric hospital admission. Of the 50 who had sustained neither conviction nor psychiatric admission in this period, one had committed suicide in hospital soon after admission, thus 49 remained alive and free of further trouble, by these blunt criteria.

Of the 87 with previous convictions, 38 had no conviction in the 2-year period and of the 66 with previous psychiatric admissions 38 had no further psychiatric admissions, but the suicide was in both the previous

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conviction and previous psychiatric admission groups.

During the first year of followup 43 were convicted, whereas in the year prior to admission 56 had been convicted. Of the 43 convicted subsequent to treatment at Henderson, 4 had never been convicted before.

The conviction rate therefore fell from 45.9 percent of the sample in the year before admission to 35.2 percent in the year after discharge and to 22.0 percent approximately in the 2nd and 3rd year. Of the total 87 who had a previous history of convictions, 39 had been reconvicted in the first year, 49 by the end of the second year, and 53 by the end of the third year so far as could be ascertained.

The overall picture of the subsequent history is not outstanding, but there is a downward trend in both further conviction and further psychiatric admission rate per year, although it is only demonstrable from the 1st to 2nd year after discharge in the latter case. How much of this is due to the natural history of remission of criminal activity and possibly psychopathic behavior with age it is not possible to say, but it was thought that a more detailed study of the response to treatment would be of value from both a prognostic and a management point of view and might add to what little is known of the natural history of psychopathic disorders.

Prognostic Factors

The group with a better outcome as indicated by neither convictions nor psychiatric admissions in the 2-year period of followup was compared with the poorer outcome group who had sustained a conviction or psychiatric admission in this time.

Social history—The factors associated with a better outcome were that a better grade of school (grammar/public) had been reached and more success had been achieved. Those with a better outcome had shown more occupational achievement in terms of reaching a skilled manual job or an inspectoral/supervisory job (nonmanual). They had shown greater stability in work in terms of holding one job for at least 2 years. More of this group had married, and in the poorer outcome group were two divorces but none in the other. The better outcome group were more likely to be older, to be above average in intelligence, and the occupation of the father was more likely to be in the successful middle occupational classes. In both groups the incidence of broken homes was high, as was irregular school attendance. Truancy showed a tendency to be more frequent in the poorer outcome group.

Previous criminal history—Factors associated with a poorer outcome were a history of previous convictions, recidivism, and the fact that the subject had been to Approved School and an adult penal establishment also. Other factors were that he was on probation at the time of referral to Henderson or was on probation when admitted, was admitted on an Order of Residence, or was referred in connection with current court proceedings.

Previous psychiatric history—Slightly more of the better outcome group had had previous psychiatric admissions, including admission to Henderson. A similar trend was shown in previous outpatient attendance both adult and Child Guidance. There was a significant difference in presentation in that a better outcome was associated with a predominance of "affective syndrome" in the presenting symptomatology. Although "action syndrome" was common in

both groups it was more likely to be the presenting feature in the poorer outcome group.

Dynamics of the therapeutic community—Voluntary participation in treatment is more likely to be associated with a successful outcome. An assessment of positive or negative involvement (rule breaking, avoidance of treatment groups, lack of participation) was made. There was a tendency for the better outcome group to show a more positive involvement and the poorer outcome group to be negative or indifferent.

When the use made of the unit facilities to plan leaving in terms of job seeking, accommodation finding, further arrangements for aftercare contact were considered, the better outcome group showed a higher proportion who had left in a planned way. The poorer outcome group had more often left abruptly or disappeared without a word.

Duration of stay—The duration of stay was variable and there is an upper limit of 1 year set by the hospital. Nearly 20 percent of the series left in the first 14 days, 31.9 percent had left before the end of the 1st month, and 62.2 percent by the end of the 3rd month. Only 13.2 percent stayed over 6 months. Failure in terms of further convictions or psychiatric admissions was more likely to be seen in those who left before 3 months when compared with those who stayed over 3 months. The early leavers also tended to be the ones with more convictions and with fewer psychiatric admissions. Of the 24 who left in under 14 days, 15 relapsed in the 2-year period and had either a further conviction or psychiatric admission, one had committed suicide, and two others died. Eight were free from relapse despite this very short stay.

Delinquents and the therapeutic community—Of 87 who had a previous history of convictions, 39 relapsed and were reconvicted in the 1st year after discharge, and by the end of the 2-year period 49 had been convicted. So far as the records made it possible to check, 53 had been convicted by the end of the 3rd year after discharge. The group of 37 which was free of further convictions for the 2-year period was compared with those who had been convicted in this period. Those who were reconvicted were more likely to have experienced a broken home, to have been in an institution, or been to an Approved School in childhood.

The main factors associated with subsequent failure were the factors related to previous criminal behavior. The group subsequently reconvicted had a significantly higher proportion who had had over two convictions prior to the Henderson admission, who were admitted to Henderson in connection with current court proceedings, and who were admitted on a Probation Order of Residence.

The influence of a psychiatric history in the prognosis of criminality—The psychiatric component of the previous history and its influence on criminality could be examined by comparing the group which had had previous convictions only with the group which had had both previous convictions and previous psychiatric admissions.

Those with a history of convictions and psychiatric admissions also were older, more had married, and their psychiatric component was reflected in the greater proportion of affective syndrome in the symptomatology, although action syndrome was still predominant. They could become more involved in the unit, and a planned leaving was significantly associated. In the 1st year after leaving there was a greater reduction in the num-

ber of convictions in this group than in the other, and in the 2nd year significantly fewer were reconvicted from the group which had the previous psychiatric admission history. In the delinquent group the presence of a previous history of psychiatric admission appeared to be a good prognostic sign as far as the likelihood of reconviction was concerned. From the 1st to the 2nd year the psychiatric admission rate of the previously psychiatric group decreased in parallel with the decreasing conviction rate, whereas the psychiatric admission rate for the group which had not previously had psychiatric admission was maintained at the same level from 1st to 2nd year.

A group who failed admission—Although contact was limited with a group of 50 consecutive cases who had been selected for admission in the usual way but who failed to attend, they are worthy of comment. They had a similar incidence of previous psychiatric admission to the 122 who were admitted. The incidence of adult convictions was lower, but the delinquents were a little more recidivist and there was a particular increase in crimes of violence, damage, and taking and driving away offenses. They were younger and in childhood had had more experience of broken homes but less experience of nonpenal institutional life, although more Approved School commitment. They present with the same "action syndromes" predominant but with a marked increase in the prominence of "thought disorder syndrome."

The main factors which this study confirms are that the highly differentiated type of Therapeutic Community as at Henderson Hospital is not the appropriate method of treatment for all psychopathic personalities and that correct selection is important.

The persistently acting-out psychopath as represented by the poorer outcome group has reached a somewhat higher level for emotional experience, but his consistent acting-out is a sustained emotion-avoiding act and the intensive type of Therapeutic Community may prove a disturbing and nonbeneficial treatment approach. It may be that the treatment needs of this type must be met in terms of management in supportive hostels and the like. More authoritarian and directive regimes, with less responsibility given to the subject, may have to be established before any maturation or social learning can proceed.

This latter may be seen as the "inadequate psychopath," the former (who in this study were the failed admission group) as the "aggressive psychopath," which leaves the third category of "creative psychopath"; if this can be stretched to accommodate those whose creations are largely fantasy, unrealistically and hopelessly ill-conceived as well as often regarded as deviant by the society in which they live, then the affective, feeling, potentially able but emotionally disorganized subject of the better outcome group can be included. Clearly, he is at a still higher level of emotional maturity and the Therapeutic Community offers a good chance of further integration and progress toward maturity.

Treating the Doll's House Marriage

FRANK S. PITTMAN III and KALMAN FLOMENHAFT

The zealous therapist eager to stamp out disease, can destroy a family. The same pathology which limits a family's healthy flexibility, makes it crisis prone, and brings it into therapy, may be cherished by the family. There are times when one should leave bad enough alone.

A common pattern of marital pathology has been described by Ibsen in *A Doll's House*. In the play, Torvald Helmer adores his child-wife, Nora. She fits the definition of a doll—"a plaything; a pretty but empty-headed person." Unknown to Helmer, Nora, years previously acted independently in his interest. As the secret nears revelation, a crisis occurs. Nora's friend makes well-intention efforts to use the crisis to equalize the marriage. When Helmer recognizes Nora's capacity for independent action, he condemns it as incompetence. Nora's response is to end the marriage.

A marriage of this sort is not unusual. We have provided crisis therapy for families containing an acutely psychotic member. In 150 families, 30 of the marriages were of the Doll's House variety. The essential features are extremely unequal relationships in which one spouse's incompetence is required or encouraged, or had been for long periods in the past. The relationship may be accepted and enjoyed by both people for long periods of time—a stable, pathological equilibrium.

The Doll and the Master

The pathology is overt and straightforward. The Dolls do not function as competent adults. It might be assumed that the husbands were realistically assessing their capabilities and loving them despite their limitations. Such is often the case, but in these marriages, the opposite was true. The women were cherished *because* of their limitations; the withdrawal of schizophrenia was encouraged as health, while independence, expressiveness, and attempts at competent functioning were seen as sickness.

Sometimes the Doll is potentially capable, but has spent a lifetime feeling and being thought of as incompetent. An occasional Doll has struggled to survive independently or to support weak men, and collapses, angry and exhausted, when she finally finds a man who will let her do so.

Doll's House Masters are more constant in their psychopathology. Each secretly feels helpless or incapable. He considers himself incapable of winning or holding a real woman. He may be overtly paranoid, but often is rigid and suspicious. He is rarely alcoholic, but may be a reformed alcoholic with a second wife.

The Usual Patterns

The Doll's House is an unequal relationship, but it may provide many years of satisfaction and happiness. The Master is loving, may be successful and generous, and is usually faithful and attentive. The Doll feels secure, loved, and wanted. She may feel more attractive than she is. Sexual adjustment is rarely a problem for the Master, and, if the Doll is frigid, which is not always the case, this may be well tolerated by both.

The Master makes a steady living and provides a comfortable home. The Doll keeps house, usually well. The Master may do the shopping and

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menu planning, and the Doll may not even handle money or drive a car. The Doll's pleasures may be entirely domestic, and she is not likely to spend her day having coffee with neighbors. The couple may have few friends and rarely go out socially, though they may have many activities they enjoy together at home.

There are variations in a Doll's House relationship. Milder degrees of inequality also exist, along the usual continuum. Unequal "marriages" also occur among homosexuals.

A relationship not unlike a Doll's House may be sanctioned by the culture. Southern "belles," Indian squaws, and Mediterranean or Japanese wives may, in external appearances at least, be only a few degrees away from Dolldem. Good wives of this sort may pride themselves on their imagination and finesse in achieving the aura of male dominance, while retaining influence and control over the family.

A Doll's House may include a female Master and a male Doll. Five Doll men were interesting. One had been a violent alcoholic prior to his incapacity with amyotrophic lateral sclerosis. Now a helpless invalid, he was adored by a long-suffering wife who formerly loathed him. The four other men were chronic schizophrenics whose strong wives supported and cherished them and saw themselves as the envy of their friends. Interestingly enough these men seemed to be pursued by other women.

Crises in the Doll's House

There seem to be three kinds of crises which disrupt successful Doll's Houses. One major source of crisis may be the *birth of a child.* It may be that a child works to soften the Doll's House by giving the wife a more adult role and the husband a real child. Either spouse might be temporarily resentful of a new child. One husband, who had left a former wife when she had children, was attempting to have his present wife declared an unfit mother (which she wasn't) by having her found insane (which she wasn't) in an effort to have the baby placed for adoption, even though he got enormous pleasure from the child, as did his wife. In the one Doll's House marriage in which a wife was determined to give away a child to her mother, the husband chose to keep the child and returned the wife to the mother. Once the children were accepted, they seemed to do reasonably well. None of the younger children was overtly symptomatic. Considering the degree of pathology in the families, (each family contained a member, usually the mother, who was overtly psychotic or otherwise considered hospitalizable), the children were happy and well cared for. The overall impression has been that children can be raised adequately in these families, after the initial shock of their birth, and that the only specific problem these children face is a confusion about marital role differentiation.

Doll's House marriages are badly prepared for absorbing *financial crises.* In part, this is because Doll's House Masters are unwilling to admit any failures in this realm, so when they need to tighten their belts, they may continue a show of financial success. Solutions, such as admitting a need to curb spending or letting the Doll spouse go to work, are usually closed to them. The Doll is more likely to be capable of working than the Master is to permit it. The result may be that the Master will withdraw from the Doll, become abusive, or even leave rather than let her help him.

By far the most common problem

comes when *other adults, in-laws, therapists, or adolescent children,* become horrified at the inequality of the relationship and determine to change it. A Doll's House wife may require a companionate relationship with someone who can treat her as an equal. They may have professional confidantes, too, and may be appealing to the rescue fantasies of these therapists.

The confidantes are likely to be rather bossy and interfering, as a profession or as a hobby. The good intentions of the confidante may be based not on what would be best for the Doll, but what would be an acceptable marital relationship for the confidante. In our series, the most likely disrupting confidantes were therapists and mothers-in-law.

Therapy

Therapy with these families is problematic. Individual therapy of the Doll is hazardous. The enthusiastic therapist is likely to side with the aspect of the Doll's ambivalence which yearns for independence. The Doll, striving to please, may obediently rebel against her husband—now identified as the villain. The result may be precipitous disruption of the family, desperate counter moves from the Master, or bizarre efforts at emancipation, calculated to fail, which leave the Doll even more convinced of her helplessness and guilty for having disappointed the therapist.

Family therapy is less hazardous, but presents problems. The structure of couples' therapy is based on a concept of marriage in which there are two equal partners with equal voice in decisions and with potential for compromise and "quid pro quo." The therapist takes the adult role to the two equal "children." This structure is anathema to a Doll Master.

We have felt that therapy succeeds best when it respects the basic inequality of the marriage. It should not be difficult for the therapist to appreciate that these two people have sought out and satisfied one another prior to the crisis that has led to the request for treatment. Also, the Master is not really a villain, although the Doll may gain approval from her mother, her therapist, or her girl friend by picturing him that way.

The Doll's independence must be supported cautiously, with careful consideration of her realistic capabilities and her husband's ability to tolerate it. If the Master is respected and if the inequality is not challenged, some compromise can be reached between what the Doll feels she wants and what the Master feels he can tolerate. The result may be far from a partnership and once the Doll has a little more freedom, she may anxiously give it up, if the therapist will let her. It must not be forgotten that there are other people involved too—friends and relatives who have some sort of investment in assisting the Doll's rebellion.

We have followed 30 families for up to 5 years. Most remained together. An appropriate goal of family therapy is to help people to live together (or apart) without driving one another crazy. This usually can be accomplished within a family framework not too different from that chosen by the family. Families with a variety of configurations have been successful. It rarely is necessary or appropriate to push the family toward some norm or ideal chosen by the therapist.

It is our impression that there is wide variation in patterns of successful marriage and that the therapist who respects uniqueness, and thereby encourages others to do so, is most likely to be helpful.

Sex Differences in Mental Health

Josef E. Garai

Differences in mental health related to national character, ethnic group, religious affiliation, social class, and family membership have been widely investigated and reported. Significant sex differences in a number of criteria used in mental health inventories, tests, and interviews have generally been ignored. The male bias characteristic of most personality theories reflects the assumption that sex differences either do not exist or that their effect on human behavior is negligible. Available mental health tests employ the same criteria for both sexes. They postulate that men and women derive happiness from similar experiences of success and satisfactions, that their unhappiness reflects similar failures, dissatisfactions, worries, and frustrations, that men and women share the same needs, motives, and life goals, and that they do not basically differ in attitudes, values, and beliefs.

It is the purpose of this review to show that significant sex differences in emotional behavior, motivation, interests, satisfactions of needs, life goals, and social relations require the development of different criteria for the evaluation of the mental health of men and women.

Significant sex differences have been reported in six areas which affect mental health.

Emotional Behavior

Females express more fears, worries, and anxieties than males at all ages. They exhibit greater sensitivity to threat, faster and more intense reactions to stress, and greater tolerance of and long-range adaptability to stress and frustration. Women's higher level of anxiety is confirmed by the greater prevalence of psychosomatic symptoms—symptoms including headaches, backaches, insomnia, and high blood pressure. Women show a greater concern with physical and mental health than men. Women's higher level of anxiety does not seem to impair their general feelings of happiness.

The two sexes differ also in the type of anxieties. Men's anxieties revolve around failure in occupational accomplishments or advancement, lack of fulfillment in creative work, inability to find a meaningful type of vocation, or difficulty in mastering the world of modern technology. Women's worries center around lack of competence in interpersonal relations, inability to achieve intimacy with a man, personality flaws, lack of a positive self-image, and insufficient approval, encouragement, and reassurance from others. Women's worries concern unsatisfactory fulfillment of the roles of homemaker and mother, anger and loss of temper in contact with the children, and lack of recognition and praise for successful role fulfillment by husband and children; men worry about inadequacies in the fulfillment of the provider and father roles, insufficient time spent with the wife and the children, and lack of encouragement toward professional advancement and success from their wives. Males are more aggressive than females. Male aggression tends to be more destructive and to provoke violence, while prosocial and verbal violence are more frequently engaged in by females. Women's anxiety tends to

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interfere with successful task performance; men's milder anxiety serves as an incentive to problem solving and effective task performance.

Motivation and Life Goals

During the first 6 months of life, boys exhibit a greater interest in objects and geometric forms than do girls who show a preference for facial features and people. Boys tend to develop a need to master the world of objects, resulting in predominant achievement orientation. Girls derive from their interest in people a strong need to manipulate people and master interpersonal relationships, leading to the prevalence of affiliative motivation.

Happiness and Unhappiness

Men derive their main life satisfaction from the successful performance of a meaningful task or occupation; women obtain their main contentment from the establishment of friendly interpersonal relations and intimacy with a lover or husband or close relations with their children. Wives blame their husbands more often for marital difficulties, although both sexes express equal feelings of inadequacy in their respective marital roles. Women also report that they are less happy than men as a group. The higher anxiety level of women is likely to lead to stronger feelings of unhappiness than those affecting men.

The mental health of the man but not that of the woman was found to affect the progress of courtship among college students. This finding has been explained by the male's greater need for aggressiveness during the courtship period. Male schizophrenics are reported to be less likely to marry than female schizophrenics because they lack the aggressiveness and self-assertion necessary for the successful performance of the courtship role.

Patterns of Breakdown in Mental Health

When a breakdown in mental health occurs, men tend to assume more feminine and women more masculine patterns of behavior.

Somatization also assumes different sexual patterns, with women displacing anxiety stemming from unresolved emotional conflicts onto headaches, backaches, insomnia, and high blood pressure, and men displacing aggression, anger, hostility, and anxiety onto their own internal and external bodily organs when they contract peptic ulcers and skin disorders more frequently than women.

Males commit approximately three times as many suicides as women whose suicidal attempts outnumber those of men by four to one. The higher male suicide rate appears to result from the greater aggressiveness and destructiveness of males which are also apparent from their more frequent use of violent methods involving firearms, explosives, and cutting and piercing instruments for self-mutilation; whereas women prefer less violent methods, demonstrated by the use of poison in the form of pills or gas. Women fail about 12 times as often as men in their efforts to carry out suicidal acts. This amazing rate of failure has been attributed to women's tendency to use suicidal attempts as potentially effective means to manipulate interpersonal relations and assure fulfillment of frustrated dependency and affiliative needs.

Identity and Intimacy

Women have a greater need for and investment in intimacy than men. Intimacy is a stage of development which is generally attained in late adolescence or early adulthood after a normal succession of stages of personality development.

Women's stronger need for intimacy is apparent from their widely reported feelings of "lack of personal fulfillment" when they have been unable to establish bonds of intimacy with a man. They are more likely than men to become aware of problems created by the loss of intimacy with a close confidante through widowhood or divorce and better able to reestablish bonds of intimacy with another person after such a loss. This resilience appears to contribute to the higher life expectancy of women, their lower rate of increase in suicides with increase in age, and the smaller likelihood that widowhood will trigger mental disease among women than among men.

A number of findings lend support to the hypothesis that a woman attains her sexual identity mainly through intimacy with a man, whereas a man attains his sex identity through identification with a worthwhile occupational or creative life goal. Failure to achieve success in work or any creative field may thus constitute the main precipitating factor for mental disease among men, and failure to attain intimacy the precursor of mental breakdown among women.

Enforced social isolation leads to greater anxiety, immobilization, and concern with impending mental breakdown in women than in men. Divorce, widowhood, and being single affect men's mental health more adversely than that of women. The single woman appears to be more capable of establishing some type of intimacy than the single man.

Acceptability of Mental Disease

Males reject mental illness as a real occurrence or a potential threat more frequently than women. Similar manifestations of mental disorders are regarded as more severe by both sexes if they are exhibited by men. Women are more likely to accept the need for help with emotional problems. This may, in part, result from the sociocultural climate in our society which permits women greater freedom to express emotions and manifest weaknesses and helplessness; the stereotype of masculinity requires the male to show physical and mental competence under all circumstances. Inability to cope with emotional problems is considered to be an expression of lack of masculinity or "unmanly." The greater acceptance of mental illness by women may reflect their generally higher level of anxiety which may induce them to seek help in coping with emotional conflicts more readily than men.

Attempts have been made to clarify the contribution of genetic and sociocultural factors to these sex differences in mental health. Further research is needed to ascertain this interaction.

Separation—A Crucial Issue in Foster Care

JACK ADLER

Separation of children from their families is a crucial issue in foster care. It affects the child who is placed and his family from whom he is separated; caseworkers, child care personnel, and foster parents must cope with children's and parents' reactions to separation and its manifestations during placement.

During the course of normal child development, separation experiences are inevitable and necessary for maturation and individuation. In this respect, separation experiences are viewed as essential and constructive. Precipitous, long-term, or repeated separations have been found to be destructive.

Significance of Separation to Child

The significance to the child of separation depends on many variables. Among these are:

Age at time of separation—Reaction to separation seems to be less severe in very early infancy before the establishment of a significant relationship with the mother figure. Each developmental stage may be viewed as critical and has its own sensitivities and vulnerability to separation.

The quality of the relationship with the mother prior to separation—Children showing the most severe reaction to separation were those who had the closest relationship with their mothers prior to separation. Older children who have close relationships with parents may be better equipped to tolerate separation and to establish meaningful relationships with substitute parental figures.

The character of maternal care subsequent to the initial separation—Provision of adequate substitute mothering following separation may mitigate the shock and prevent development of serious disturbance.

The character of the relationship with the parents during separation—If the child is able to maintain a relationship with the parents, the impact of separation is likely to be less severe.

Duration of separation—It may be a single or repeated brief occurrences, as in the case of a child's hospitalization, or a short-term placement as a consequence of a mother's hospitalization. A child's reaction will be determined by the degree of his emotional maturity, nature of his relationship with his mother, process of preparation, and conditions to which he is subjected during placement. Repeated long-term separations imply continuous family crises. These can be most traumatic and may involve serious emotional deprivation since the original sense of loss and abandonment are reinforced and reactivated by each replacement.

The role of constitutional factors—The nature of a child's "temperament" may affect his reaction to changes in maternal care, including those resulting from placement.

The scope of the separation problem is extensive. About a quarter of a million children are in foster care in the United States and the rate is increasing. During the nineteenth century, the principal reasons for placement were death of parents and economic dependency. These factors have for the most part been eliminated by medical science, improved medical

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care, reduction of industrial accidents, and economic assistance through welfare programs. Family breakdown has become the single most contributing cause. A variety of social services have been established to prevent disruption of family life, but these services are still insufficient, and do not reach the socioeconomically deprived, underprivileged minority population in our cities.

Children's reactions to separation vary. Most children experience a sense of abandonment. They may blame themselves for imagined offenses which may not have any basis in reality. Their feelings of guilt and anger may be repressed, with resulting anxieties and emergence of neurotic symptoms.

When placed, the child may react with displacement of emotions. He may expect from the fostering adults the attitudes and behavior he experienced in his own parents. He may view them as people who will punish him for imagined or actual sins. He may protect himself by "attacking" first or by withdrawing into isolation. A child may hesitate to establish close relationships with the adults because of the fear that if he loves them his own parents will resent it, or because of a feeling that if he does, he will be rejected and be subjected to another separation.

The older child, especially the adolescent, faces additional difficulties. The general instabilities and vicissitudes which pervade adolescence are aggravated by separation. As foster (or house) parents are drawn into the vortex of the emotional turmoil that accompanies the strivings for independence on the part of the adolescent foster child, they may become the object of defiance and rebelliousness, rationalized by such expressions as "You can't tell me what to do. You are not my parents!"

The child's emotional ties to his family persist during placement. His need to relate to his origin continues to be expressed. The young child will more likely do so through play; the older child may act out unexpressed feelings or verbalize them in devious ways if he cannot express them directly. It is important to understand and respect this expression and to provide opportunities for the child to work them through. Excluding the infant and the very young, the child should, if possible or feasible, be involved throughout the intake and placement process. He needs to be aware of what is going on so that he can feel assured that there are no realistic alternatives and that at least temporarily his parents cannot care for him. Joint interviews with parents or close relatives may facilitate the process. Foster parents (or child care counselors) require preparation for the new arrival. The greater their understanding, the better equipped they will be to cope with the child's feelings and transference manifestations. The very young child needs provision for continuity between the known and the new caretakers. Foster or adoptive parents can be helped to avoid drastic changes to which the child may be required to adapt.

The child's emotional investment in his natural family may be intensified after the physical separation occurs, because he may develop a fantasy about it in unrealistic terms. In extreme cases a child may replace reality with fantasies where the realities are replaced by "ideal" loving parents.

Impact of Separation on Parents

The feelings experienced by the parents are generally given insufficient attention. Feelings about separation permeate all families and affect all

its members. Feelings of guilt and anger are intensified by outside pressures. Community attitudes are generally not sympathetic to parents who place their children. Their guilt feelings and sense of failure as parents become intensified. These may be reinforced by foster parents (or child care personnel) who convey to the children, indirectly or directly, that they are "rescuing" or "protecting" them from their "irresponsible" parents.

Some parents try to alleviate guilt by over-indulging their children during visits; others disparage the foster parents, child, or the institution. Some maintain the delusion that the child alone or a spouse is responsible for the placement. Parents whose children were placed through the family court because of parental neglect or a child's delinquent behavior may be overtly disruptive. Consideration must be given to the degree of parental disturbance, since this will determine the nature of the reaction.

Parental feelings about separation and placement are not always expressed to social workers. Awareness of this is pertinent in work with socially and economically disadvantaged families. A caseworker confronted by the problems faced by these families may be so preoccupied with efforts to alleviate the realities of their existence that he may not be attuned to the emotional implications when placement of a child is being considered. He may inadvertently convey to them the feeling that he is insensitive to their suffering. If he is able to help them see that he empathizes with them, they may feel a greater sense of trust and will more readily work with him around the reality problems facing them.

There are situations where it becomes essential to separate a child from his parents expeditiously. These include cases of chronic neglect and of physical abuse. These children may require long-term or permanent placement because their families may never be reintegrated. In such situations the caseworker serves as the enabling agent in developing the type of home which will provide the child with a sense of security and belonging and enhance the achievement of a positive identity.

Reactions of Foster Parents

Foster parents are also caught in the complex web of emotions. When the child becomes a significant part of the foster family, foster parents and their children may feel threatened by continuing ties between himself and his natural family and the agency's supervisory activities. The ever present possibility of losing the child can be a threat hanging over all of them. When it occurs, reaction will vary with circumstances of the child's departure from the foster home.

Attitudes of foster parents are expression of their personalities and their life experience. The maintenance of a harmonious, mutually positive relationship among foster parents, child, and natural parents, is not easily achievable because of the complexity of the conscious and unconscious elements which permeate these relationships.

Natural Foster Families and Child As One Network

Higher priorities continue to be given to removal of children from families where adverse conditions exist than to the correction of these disruptive conditions and the reintegration of families as soon as possible following placement. Whenever there is a likelihood that a child will return to his family, a continuous relation-

ship between foster and natural parents should be encouraged.

There are situations where realistic considerations hinder joint planning and participation. It may be impossible for severely disturbed or guilt-ridden parents to share a child with a foster family. If efforts to overcome the obstacles which hinder a harmonious relationship between natural and foster parents are unsuccessful, the placement situation will have to be reevaluated to determine the action necessary to assure the optimum protection for the child.

A consistent continuous relationship with a caseworker can serve as a bridge between the natural and foster families. If it is done, it may serve to reduce a child's projection that the agency is responsible for his separation. He may become aware that the agency is a source of his well-being and that its objective is to provide him with the best possible substitute family environment.

The complexities and multiplicity of interpersonal relationships in child placement complicate the caseworker's role. The most important role of the caseworker is to keep on creating an environment for the child's healthiest development possible. This requires skill, sensitivity, self-awareness, and understanding of the complexity of the emotional interrelationships. The caseworker is in a position to exercise a great deal of power. This power must be exercised with care and self-awareness. For example, a caseworker's unresolved conflicts with his own parents may color his attitudes toward natural, foster parents, or child counselors. In foster care one finds devotion and dedication to children on the part of foster parents, child-care counselors, and caseworkers. This investment is, for the most part, based on genuine and mature concern for the child, and the child responds favorably to the adult's interest and concern. If it is motivated by neurotic needs, it may be destructive because it perpetuates dependency, feeds resentment, and hinders independent personality growth. In general, children do not want to be "rescued" from their parents, no matter how inadequately the latter may be evaluated in terms of society's standards of parenting.

Although child welfare practices have not kept pace with changing philosophy which strives for conservation and reintegration of families, there have been significant achievements in this direction. Greater recognition of the importance of family ties to children and parents has been reflected in the development of supportive child welfare services which enable parents to care for their children at home. Many agencies are introducing group techniques in working with foster parents and foster children, particularly with adolescents. Separation and its effects are prevalent topics for discussions. Greater interest in the effects of separation on children and parents are reflected in current child welfare research.

Identifying Emotional Disturbance in Persons Seen in Industrial Dispensaries

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This report focuses on the extent to which nonpsychiatric physicians in industrial dispensaries detected emotional problems among employees, the nature and degree of disability resulting from these emotional problems, and the resources used by the physician to treat these patients. Two companies in an industry of a highly technical nature provided data from dispensaries serving five plants and administrative units with an employee population of approximately 20,000. Each dispensary reported data for a 1-month period.

The form used to record the data was divided into two parts: information on the characteristics of the dispensary population (age, sex, marital status, socioeconomic characteristics, years employed, presenting problem, medical diagnosis, and number of visits during last 12 months). If the patient was judged to have an emotional problem at the time of the visit, the physician completed the second portion, which included information on the physician's impression of the patient's "psychiatric" diagnosis, level of impairment, length of time patient was bothered by problem, previous psychiatric care, and type of mental health care provided by the dispensary.

Comparison of emotional disorder cases with the general clinic population—Of the 3,165 patients 20 through 64 years of age seen during the reporting period, 153 or 4.8 percent were considered to have had an emotional, psychiatric, mental, or personality disorder and are designated here as the "emotional disorder" group. The proportion of patients who were determined to have an emotional disorder increased for each age group, from 2.5 percent for patients 20–29 years of age to 8.1 percent for those 50–64 years of age. This may have been due in part to the fact that older patients may have been better known to physicians.

Data by sex show a proportion with emotional problems of 5.3 of every 100 men and 4.1 of every 100 women, with relatively higher proportions for men than women in all age groups except 20–29 years of age. However, differences between both the overall and age-specific percents, by sex, were not statistically significant. The relative frequency of emotional disorders was high among separated and divorced persons (10.3 percent) but low among the single (4.4 percent) and the married (4.8 percent).

Within each occupation group, the proportion of patients with emotional disorders was high for those of high occupational status—8.2 percent for managers and 5.8 for professionals. Service workers, which included protective personnel, elevator operators, porters, or other such workers requiring relatively little training, also showed a relatively high proportion with emotional disorder, 6.1 percent, though they represented a relatively small group.

Relative frequencies were also highest for those living in census tracts of high socioeconomic ranking

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(6.8 percent compared to 4.1 to 5.0 percent for other socioeconomic areas).

Clinicians were asked to indicate which of the following major reasons induced employees to come to the dispensary: accident or injury, physical symptoms, emotional symptoms, preventive measures, to seek advice or counseling, or for other reasons. Among the "emotional disorder" group, 52 percent went to the dispensary for physical reasons, such as accident, physical symptoms and preventive measures in contrast to 89 percent of the remaining patients, that is, the "nonemotional disorder" group. About 39 percent of the "emotional disorder" group had emotional symptoms or sought advice and counseling compared to 1 percent of the "nonemotional disorder" caseload. Eighty-four percent of patients who came to the dispensary because of emotional symptoms were included in the "emotional disorder" group. In contrast, the advice-seeking patients were not judged to have had an emotional problem since only 39 percent were so classified. Proportions of patients with emotional disorders were largest among older patients regardless of presenting problem, but particularly so for those coming to the dispensary for emotional symptoms or to seek advice or counseling.

Physicians indicated the medical diagnosis for all patients, including those with emotional disorders. Among the somatic conditions reported for the "emotional disorder" group, the most frequent were the digestive, circulatory, and allergy and endocrine disorders. "Emotional disorder" cases generally had more visits during the previous 12 months than the general patient caseload.

"Emotional disorder" patients—Physicians were asked to assign a broad psychiatric diagnosis to those patients considered to have an emotional, psychiatric, mental, or personality problem. While it is recognized that the assignment of psychiatric diagnoses is difficult, it is assumed that nonpsychiatric physicians can recognize psychiatric disorders and are able to assign such disorders into broad groupings.

The fact that physicians were not required to assign a psychiatric diagnosis probably accounted for a substantial portion of the 37 percent of cases in which the space for recording the psychiatric diagnosis was left blank. Nevertheless, physicans judged that 7 percent had psychotic disorders, 32 percent were psychoneurotic, and 17 percent had personality disorders. The percentage with personality disorders was appreciably higher for the older than younger patients. In addition, 6 percent were diagnosed with other or unspecified psychiatric disorders. Age, and/or length of time on the job, may have been factors in assigning a psychiatric diagnosis since relatively more of the older patients were given specific diagnoses.

Patients diagnosed as psychotic and psychoneurotic were equally likely to come to the dispensary for physical or emotional symptoms (about 35 percent for each) but few came for accident or injury, for advice or counseling, or for preventive measures. Study patients diagnosed with personality disorders came at the same relative frequency for each major category of "presenting problem." Also, a substantial proportion of persons with personality disorders came because of accidents or injuries or for preventive services.

When physicians were asked how long they believed their patients were bothered by their emotional disorder, they reported that more than half of

their patients were bothered for 5 or more years, regardless of psychiatric diagnosis.

Doctors were asked to judge the degree of psychiatric impairment of the "emotional disorder" group. Impairment was reported for 88 percent. Of these, 15 percent were considered severely impaired, 43 percent moderately, and 37 percent mildly impaired, while 5 percent showed no functional impairment. The impairment was considered severe or moderate for 80 percent of the psychotics, and 85 percent of those with personality disorders, but for only 51 percent of the psychoneurotics. Although differences were small, impairment was more serious for older patients and for those with problems of 5 years' or more duration.

Physicians were asked to indicate if "emotional disorder" patients had had previous psychiatric care and, if so, what kinds. Such care was reported for 56 percent. Of these, 15 percent received care in more than one facility, 86 percent had some form of outpatient psychiatric or ancillary service, and 25 percent inpatient psychiatric care; 12 percent had both types. Thirty-five percent with known care had seen a private psychiatrist; few had received services in a mental health clinic or family agency.

Physicians were asked to indicate if they provided mental health care in terms of supportive therapy, suggestions for environmental changes, and/or prescription of drugs for patients they considered to have had emotional disorders. For those for which a response was given, 96 percent had received supportive therapy, 66 percent were given drugs, but only 12 percent received suggestions for environmental changes. Sixty-five percent had received more than one type of care, most frequently a combination of supportive and drug therapy. The only exception was among the psychotic group in which supportive therapy was frequently provided without other forms of care.

Although the experience observed among the study population is not necessarily reflective of the total employed population in these companies, the relatively low frequency of emotional disorders may have been attributable to a low-risk, stable, and employed population working in well-paid, prestigious establishments. Employees were screened through job interviews and physical examinations, eliminating some persons with overt psychiatric problems. Other factors may have been the encouragement of adequate health care oriented toward prevention and the partial subsidizing of good insurance coverage. The companies have been supportive of employees with emotional problems and assist such persons in eliminating stressful on-the-job situations even if this means changing jobs.

The finding that only 5 percent of the employees were considered to have an emotional disorder may have important implications. If a matching comparison of these cases with those in the psychiatric case register indicates that the "emotional disorder" group was underdetected, a need for further training of physicians might be indicated. But if there is little or no indication of underdetection and if the findings represent those for the total employed population in these companies, one could infer that a stable, well-compensated working environment, accompanied by good health care, is conducive to a mentally healthy employee population.

Passive Learning from Television

HERBERT E. KRUGMAN and EUGENE L. HARTLEY

When we speak about learning we usually talk about motivation, practice, achievement, new skills, or insights attained—learning as active and purposive behavior. We know that there are passive kinds of learning, but we focus less on these, in part because they are presumed to be less effective, in part because they have been less noticeable—at least until the rise of the mass media, especially the electronic media.

Much of what is taught by the mass media involves passive learning, especially among young television viewers. This presents a difficult evaluation problem since the material is unrelated to immediate needs or situations. If it were, the learning would be more than passive.

Critics of television recognize that later events may trigger what has been passively learned and lain dormant. They have been concerned about the content, especially the violent content of television that may be shown to children. Few have asked *how* the child learns such content at the time of exposure, or how this may be different in process or consequence from active learning.

The purpose of this paper is to identify some of the differences between passive and active learning, and to suggest some implications for education and television.

A major distinction between passive and active learning is physical and concerns constitutional, inborn characteristics of the human being. Such characteristics have been ignored in an emphasis on verbal data and the measurement of comprehension, recall, attitudes, and the like. In the midst of the easily gathered verbal data many have lost sight of man's animal, mechanical, and physical properties, which define the limits, constraints, and conditions within which those verbal data function.

Research on those physical properties related to communication influence has been less visible until recently for several reasons. Most of the pioneers (e.g., Wundt, Helmholtz, James) died before the development of radio and television. Most of the medical people who are interested in man's physical properties are not interested in the question of passive vs. active learning (to a great extent the same is true of experimental psychology). The branch of medicine most relevant to the question is among the most recent. This involves certain aspects of the study of the brain, specifically electroencephalography. The relevant work done within the field of physiology achieved little cohesiveness in U. S. academic circles until translation and publication in the early sixties of the major Russian accomplishments.

This research has relevance to the mass media in direct proportion to its age. That is, the older nineteenth-century research has the most relevance because it contains scientific observations that have been repeatedly rediscovered, repeatedly reconfirmed, and prior to its current relevance, repeatedly forgotten.

Many of these observations concern some physical qualities of the phenomenon of attention. These acquire special relevance when attention is treated as the core aspect of

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human experience. For example, William James has said: "My experience is what I agree to attend to."

James defined two types of attention, voluntary and involuntary, and noted that voluntary attention cannot be continuous; i.e., voluntary attention is a continual returning of attention to its object when it wanders away.

James's distinction between voluntary and involuntary attention means that much of thinking, learning, and reading represents a sequence of successive efforts to attend, while much of the viewing of life around us, films, TV, and other *changing* stimuli are far less likely to require effort. In other words, the change, the switching or the rhythmic process goes on inside man when he is working at the job of attention, *or* it goes on outside man and inside (e.g.) the moving film as it relieves man of that work. The alternation process, furthermore, has an upper ceiling of about 10 times per second. Without this 10-per-second limitation, we would not experience the illusion of movement when we looked at a motion picture film.

A single TV commercial had much to do with one of the authors' interest in attention and rates of stimulation. This was the "Nice 'N' Easy" commercial, which used a slow-motion technique borrowed from the film, "The Pawnbroker." The commercial had high recall scores but aroused absolutely no pupillary response. This seemed unusual. Was the commercial learned without any excitement whatsoever, or was there another element present, an unmeasured response? Is the opposite of excitement just nothing? Is calm a flat emptiness?

The opposite of excitement is apparently relaxation, and relaxation is much more than a mere absence of excitement. That is, relaxation has physical properties which are just as real as, though different from, those of excitement. This dimension has not been measured.

With such measures of arousal as pupil, skin, heart, or respiration, an absence of excitement brings the measure back to a minimal baseline. No further information is produced. With brain waves, however, a decline in arousal would be evidenced by a slowing of so-called beta waves, rhythmic frequencies emitted in the 30–40 cycle per second range. As relaxation appeared there would also appear the relatively slow alpha waves of about 10 per second. These or their harmonics would largely replace or dominate the beta waves. Alpha waves are not slow beta waves; they are a new parameter and offer the promise of measuring physical tones of peacefulness and well-being which might otherwise be looked upon only as verbal artifacts.

The most special quality of passive learning is, by definition, an absence of aroused resistance to what is learned; resistance is exciting and a corollary, therefore, of active learning. This means that passively learned material has an important "advantage" which some have also associated with so-called subliminal perception, extrasensory perception, or hypnotism. This advantage, however, is not a property of the stimulus, but of the respondent; i.e., he can learn passively so long as the material is acceptable to him, without conflict.

It is possible that the relaxed and successful character of passive learning can be enhanced by the artificial induction of alpha rhythm, with the aid of a flickering light. For example, if a person wants to give up smoking and welcomes suggestion on this problem, then he may respond more

successfully if the suggestion is made during an alpha-induced condition. The time may come when the mass media may create special programs to help people modify certain attitudes or behavior.

The distinction between passive and active learning involves a distinction between relaxation and excitement, two different aspects of what is usually called "interest." Too much of what we know about experience has been defined in terms of what excites, and little is known about what relaxes. This imbalance has been a function of the fact that excitement is easily measured.

For medicine there may be an opportunity to go beyond the routine procedures for EEG diagnosis of patients—i.e., with the patient supine, resting and eyes closed. The patient may also be measured while performing some standard tasks with eyes open. Many psychologists and neurologists are curious about "normal" EEG reports of patients who are otherwise known to be not normal. Perhaps such patients are EEG "normal" while near sleep, but not while trying to cope actively with tasks.

For early education there may be an opportunity to accept the fact that many children fidget in class, and that this interference with their attention is not to be blamed on parents, teachers, or the child. Mild drugging of these children, or training in relaxation through alpha driving, may be helpful to their educational achievement.

For adult education television there may be an opportunity to design programs to help people stop smoking, to lose weight, to control drinking habits, etc.

For public television there may be an opportunity to accept without shame the fact that it has taught violence to an entire generation. The story of television violence is not that a new generation *is* more violent but that the new generation *knows* more violence.

For students of attitude change and of the influence of the mass media, there is an opportunity to accept the fact that knowledge and information are more important than attitudes. The mass media have taught our society what it needs to know in order to have attitudes on a thousand serious matters which before television would elicit only "don't knows." This attention to serious matters is made possible in part because television is a cool medium, one which people can attend to calmly. The thesis of this paper is that for many people the attention to and learning about serious matters on television could *only* have been successful if done calmly, without excitement and without effort.

The next step in research on these matters is to record the brain waves of individual respondents performing simple everyday tasks, including the viewing of various television programs. By comparing immediate physiological response with later measures of what has been learned, we may begin to answer questions about just how much attention (arousal, interest) is required to learn what.

Methylphenidate and Thioridazine: Learning, Reaction Time, Activity, and Classroom Behavior in Disturbed Children

Robert L. Sprague, Kenneth R. Barnes, and John S. Werry

The purpose of this study was to determine the effects of a stimulant (methylphenidate) and a tranquilizer (thioridazine) on the behavior of emotionally disturbed underachieving boys. Three measures—learning, reaction time, and activity level—were taken in a highly structured situation.

Twelve boys from classes for emotionally disturbed children were selected for study. They had a mean age of 94.2 months, mean IQ of 98.6, and mean weight of 65 lbs. They had been placed in the special classes for antisocial, distractible, and hyperactive behavior, though three subjects exhibited extreme shyness and social withdrawal. Academically, all were underachievers. Two male experimenters were used.

The study employed repeated measures on the same group of subjects on three factors: drug (methylphenidate, placebo, and thioridazine); dosage (low and high); and number of stimuli presented in the stimulus array. The subjects served as their own control. This design was used for the following reasons: The population of subjects available was extremely limited. With each subject serving as his own control, the possibility of differences arising between the drug conditions due to sampling error is eliminated.

The dosages for methylphenidate were 0.25 mg./kg. (low) and 0.35 mg./kg. (high). The dosages for thioridazine were 0.75 mg./kg. (low) and 1.00 mg./kg. (high). Tablets of similar size and number were given in the placebo condition.

For each subject, dosage was held constant for the first 3 days and last 3 days of testing. Half of the subjects were randomly assigned to receive the low dosage first and the high dosage second, the other half received the inverse order. Within each dosage level, the sequence of drugs was counterbalanced. Within this counterbalancing constraint, subjects were randomly assigned to a drug sequence.

A pool of 20 stimuli was developed from pictures taken from children's books. Stimuli common to the experience of all subjects were chosen. Stimuli that might have emotional connotations were excluded.

The task involved a type of one-trial learning with a subsequent recognition task involving partial recognition of the stimuli presented on the training trial. The training trial involved the presentation of a matrix of stimuli which could contain either one, two, or three pictures. The stimuli were exposed for 1 second each. After the training exposure, the screen went blank for an interpresentation interval of 4 seconds. After the interpresentation interval elapsed, a single test stimulus was shown. The onset of the test stimulus was accompanied by a ½-second buzzer.

Each subject sat in front of the screen. Beneath the screen, on the right and on the left, were two panels. The panel on the right was

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labeled "same" and the one on the left labeled "different." A slight pressure from the subject's hand depressed a microswitch which recorded the press as a response. Each subject was questioned as to which hand he preferred to use to press the panels, and he was instructed to leave his nonpreferred hand in his lap. He was also instructed to keep his preferred hand on a center rest before and after he made his response.

Whenever the response was correct, one M & M candy was automatically dropped into a transparent plastic container located midway between the two response panels. The candy was visible to the subject, who was permitted to take all the candy he had earned.

Activity level or the amount of wiggling in the chair during the session was measured by a stabilimetric cushion. Counters recorded the total number of responses, the number of correct responses, and the reaction time in hundredths of a second from the onset of the test stimulus to the depression of one of the response panels.

Drugs were administered in commercially available tablet form 2 hours before subjects participated in the experiment. Neither the person administering the drug, the experimenter testing the subject, nor the subject knew what medication was being administered.

Approximately 1½ hours after drug administration, the behavior of the subjects in the classroom was rated by trained observers. The method was essentially that of a frequency count during academic seat work. Three broad classes of behavior were rated: seven types of common deviant behaviors; attention to school work; and teacher-pupil contacts. Three additional measures were available, a teacher's evaluation of the quality of that day for each individual child, and the number and duration of any punishment accorded (principally, isolation from the class).

From the laboratory situation, there were three measures: accuracy of responding or the number of correct responses; reaction time in hundredths of a second from the onset of the stimulus to the subject's response; and activity in the stabilimetric cushion during the experimental session.

Drug administration significantly influenced accuracy. Methylphenidate produced significantly higher accuracy scores than either placebo or thioridazine, but the thioridazine and placebo difference fell just short of the .05 level of significance.

The drugs significantly altered reaction time. Methylphenidate resulted in significantly faster reaction time than either placebo or thioridazine, but the thioridazine and placebo difference fell just short of the .05 level of significance. In neither the accuracy nor reaction time did the dosage level produce any significant effect.

The activity measures were not heterogeneous, as is often the case. Activity was reduced under methylphenidate, but activity under placebo and thioridazine was almost identical. Again, dosage had no significant effect.

The number of stimuli in the stimulus matrix presented during the training trials had a significant influence on the subject's performance. As the number of stimuli increased, the accuracy level declined. The number of stimuli in the matrix also had a significant influence on reaction time. As the number of stimuli in the matrix increased, reaction time became slower. There was no sig-

nificant effect on the number of stimuli on activity level. Only isolation was significantly influenced by the drug administration. On the number of "isolations," only methylphenidate and placebo significantly differed, with methylphenidate producing fewer isolations. The "on-task" rating shows that methylphenidate produced higher percentages of on-task behavior than either thioridazine or placebo. On the "teacher-initiated +" rating, methylphenidate produced higher contact than thioridazine. Methylphenidate produced more "pupil-initiated +" contact than placebo did. For "quality of day," a subjective rating by the teacher, methylphenidate produced significantly higher ratings compared to placebo and thioridazine.

This study raises important issues in pediatric psychopharmacology. The first is the problem of measuring drug effects, and the other, is the elucidation of the mechanism of any drug effects observed.

Measuring drug effects—Some of the commonest sources of difficulty are:

1. Observer bias, usually minimized by the use of double-blind drug/placebo or drug/drug procedures and by employing proper controls such as contrast groups or crossover, the latter being the technique of the present study.

2. The use of error-prone and/or insensitive measures. Commonly used measures are vague, unspecified, unstandardized, and of unknown reliability, particularly in the case of clinical measures. One way of dealing with this problem is to use laboratory procedures and automate as much of the process as possible.

On the negative side, the relevance of laboratory measures to the "real-life" behavior of the child is often obscure, thus limiting their usefulness.

We attempted to deal with these problems by using both laboratory and clinical measures. Both showed drug effects. The laboratory measures revealed that methylphenidate improved learning performance while thioridazine decreased learning performance. Concomitant with the improvement in performance, methylphenidate reduced activity. These findings indicate methylphenidate improved attention. The classroom behavior observation measures corroborated the findings from the laboratory in that methylphenidate increased attention to school work and improved the quality of the child's behavior that day as rated by the teacher. Additionally, social interactions were increased by methylphenidate; these findings could not corroborate the laboratory findings since social interaction was not measured there.

A third difficulty is that relating to the medication itself, notably the necessity for optimal dosage, and for insuring that medication is actually being taken and at the time specified.

We felt the wisest procedure was to use standard dosages based on the body weight and derived on an empirical basis from previous studies. Though no dosage effect was observed, it was probably due to a narrow spread between dosage levels and in no way obviates the necessity for systematic study of this area.

To deal with the problem of insuring that medication was given at the right time, drugs were given by staff who supervised the children to make sure of ingestion. Duration of action of the drug also presented a problem since, again, there are no data on this in children, though 1½ to 2½ hours seemed a fairly safe guess. As

with dosage, systematic studies of onset and duration of drug effects are needed, though in both instances the need for accurate measures of drug action is prerequisite.

The mechanism of psychological and behavioral drug effects—Hyperactivity is one of the most common presenting complaints in children who appear at mental health facilities. Clinical observations suggest that hyperactive children often have learning problems, and inverse relationships between activity level and learning in children have been demonstrated in a laboratory learning situation. The nature of the covariance of learning and activity level are quite obscure. Methylphenidate might improve some aspects of learning and thus reduce motor overflow, or it might reduce activity and thus decrease distractibility. Or, it might change some central process with motor activity and learning both changing as a result.

There is some evidence that the effect of methylphenidate on motor activity is not constant since some studies suggest that it can increase activity. One explanation is that the situation may interact with the drug effects.

The term "learning" has been used here in a generic sense to encompass a very multifaceted process. One of the primary requirements for learning occurs at the input level, namely the ability to attend to the task material. It is possible that drugs such as methylphenidate can alter the perception of these properties of the stimuli, but this would seem somewhat unlikely. On the other hand, it is possible that drugs may alter attention to nonrelevant stimuli or, in short, reduce distractibility.

Another component of learning is memory. Recent studies suggest that there are two distinct memory processes, short-term and long-term. If the basis of memory is some kind of chemical coding, then it seems plausible that changes in the chemical environment of the brain produced by drugs might enhance short-term memory. The task in this study involved short-term memory in the sense that subjects had to store information from the training stimulus for at least 4 seconds before acting upon that information in the test trial.

One feature in the study of drugs and learning in animals is the repeated demonstration of a failure of transfer of learning between the drug and non-drug states. In one of the few studies of this problem in children, there appeared to be more differential forgetting when learning occurred "on drug," suggesting, perhaps, an interference with the memory mechanism. The problem of the durability of drug-facilitated learning certainly requires further investigation.

Mental Health and Behavioral Sciences: One Federal Agency's Role in the Behavioral Sciences

ELI A. RUBINSTEIN AND GEORGE V. COELHO

The behavioral sciences are increasingly being called on to contribute to the solution of social problems. Public interest in the sciences concerned with human behavior is reflected in governmental efforts to expand the role of these sciences. These efforts have been responded to from within the behavioral sciences by a series of recent reports. In all this attention there has not been sufficient recognition of the interaction between the behavioral sciences and the field of mental health. This development has had a significant impact on the growth of the behavioral sciences and the operation of mental health programs.

National Institute of Mental Health and the Behavioral Sciences

As the principal Federal agency responsible for the coordination and support of research on the causes, diagnosis, treatment, prevention, and control of mental illness, and the promotion of mental health, NIMH has operated a comprehensive set of programs. In particular, it uses concepts and methods of the behavioral sciences in innovating and evaluating treatment, rehabilitation, and preventive approaches in special programs relating to crime and delinquency, suicide, alcoholism, narcotic addiction, and drug abuse.

The Institute has a multidisciplinary environment that stimulates the flexible organization and operation of research programs concerned with fundamental aspects of normal and abnormal behavior. Viewing the behavioral sciences as the substantive base for a variety of mental health activities, the Institute has developed programs of basic research, problem-oriented research in clinical and field settings, and applied research. It has balanced its support of research, training, and service programs in about equal proportions.

NIMH early invested in the behavioral sciences because it needed to increase fundamental knowledge on which to build clinical and applied research programs. By 1959, the National Advisory Mental Health Council endorsed the policy that NIMH be the focal point for support of training and research in the behavioral sciences. By 1965, the NIMH was recognized by behavioral scientists as the prime Federal source for research and training support in psychiatry, psychology, sociology, anthropology, and behavioral biology.

Illustrative Research Areas

The NIMH conducts and supports multidisciplinary activities that are best examined by illustration.

Schizophrenia—Schizophrenic disorders reflect abnormalities in basic human functions of learning and remembering, perception and cognition, language and communication, and the capacity to form meaningful interpersonal relationships and positive social attitudes. The Institute has conducted and supported research on these psychological processes, and on neurophysiological and psychosocial aspects of their development.

Despite increases in knowledge, we do not know how genetic and experiential factors interact at critical pe-

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riods of behavioral development in different sociocultural environments. Because there is still considerable disagreement and confusion regarding the diagnosis, natural history of the illness, and response to various treatments given, NIMH and the World Health Organization jointly launched a pilot study of schizophrenia. Each of the eight participating countries (United States, Russia, Denmark, Great Britain, Columbia, Nigeria, Nationalist China, and India) has a field station in which subjects are screened by uniform methods for absence of organic or physical disease. Standard research techniques will be designed to provide the clinical identification of schizophrenia, to describe the psychological and behavioral characteristics of the patients, and to assess the effect of cultural and social variables in the course of the disease.

Brain-behavior relations—The first NIMH research grant concerned the neurological aspects of learning. Since then, support in intramural and extramural research has helped to advance understanding of cognitive processes in personality development —the role of attention and perception, learning and reasoning, decision making and problem solving, fantasy, and dreaming. Sensitive and powerful instrumentation, aided by computer technology, has helped investigators to clarify the role of the brain and nervous system and subcortical structures in the control of behavior and mediation of emotional experiences; and to map the specific neural sites of motivation, especially of sex, hunger, thirst, and aggressiveness.

Small-group interaction—Since adaptive behavior involves perception, learning, and motivation in a social environment, and the child's personality develops in interaction with other people, knowledge about the patterning and growth of symbolic human functions is being developed and applied. The following illustrate some program directions: communication styles in families of schizophrenics; differential effects of the social climates of wards on patient behavior; the hospital as a social system; public attitudes toward and beliefs about illness reflecting subcultural and socioeconomic differences of community groups.

Collective behavior—In 1968 the Institute prepared reports on behavioral science research relevant to mass violence. Prior to that summer, the Institute had supported studies dealing with civil disorders, e.g., the 10-city study of the origin and control of community violence conducted at Brandeis University, and other studies relating to collective behavior, involving protest, conflict, and hostility. Many studies focus on consequences of deprivation and discrimination on self-esteem and self-identity as important factors in social adaptation.

We know much from research about the dynamics of social perception and attitude change, intergroup conflict and prejudice, and the development of aggressive behavior and hostility. Important hormonal, psychological, and neurophysiological variables have been identified in laboratory work on individual reaction to stress. But extrapolations from experimental samples and clinical cases to explain group violence in real-life stress tend to be farfetched and are at best misleading. Naturalistic research models are also needed.

Psychiatric disorders and behavior research—One class of disorders relates to the extreme variations in human aggressiveness and violence which come to psychiatric attention. Paranoid reactions constitute one of the most serious problems of psychia-

try and are also a serious social problem. We do not know how paranoid attitudes develop. Experiments with nonhuman primates suggest some clues regarding how abnormal rearing conditions can produce severe behavior disorders in adult life. Extremely violent behavior, induced in primate-separation experiments, and excessive withdrawal and avoidance of interanimal contact induced in "isolation-rearing" experiments, have provided models of human disorders in which behavioral and biological linkages can be explored more deeply than would be possible in human subjects. Individual differences in destructive aggressiveness in later development may be produced, according to one hypothesis, by interaction of biological dispositions toward learning aggressive behavior and exposure to specific learning situations. Psychiatrists and other behavioral scientists will need to replicate experiments using multiple methods in a wide variety of settings in order to understand how biological and social factors interact in the development of aggressive behavior—its instigation and expression as well as its channeling and regulation.

The Institute is increasingly concerned with competence motivation, coping behavior, and creatively adaptive responses to crises. Clinical investigations of patient recovery and rehabilitation make implicit references to the individual's resilience and potential for growth. Community-oriented efforts in preventive intervention emphasize concepts of positive mental health. Empirical research is now focused on such questions as: How do individuals deal with the threatening implications of severe injury or illness? Why are some transitions traumatic for some people and growth promoting for others? What are the ways in which human beings maintain a sense of worth and manage anxiety in stressful social crises provoked by natural disaster, urban renewal, migration, intergroup conflict, and war? These questions call for the cooperation of behavioral scientists who are trained to learn and work together in a multidisciplinary environment that challenges them to analyze mental health problems of broad social significance.

Interdisciplinary Research Training

NIMH initiated programs that have become the Nation's major source of behavioral sciences research and training support. When the Institute was founded in 1948, grants were provided to increase manpower in clinical psychology as a core mental health discipline, with a fellowship program for research training in all the scientific disciplines related to mental health. In 1957, the behavioral sciences training program extended opportunities for psychological scientists of all specialties. At the same time, a research training grant program in the social sciences was inaugurated to develop resources and skills required for the study of mental health problems by sociologists, anthropologists, social psychologists, economists, political scientists, and others. For the past 15 years, the "mental health career investigator awards" program has enabled psychiatrists and other behavioral scientists to obtain training and spend considerable amounts of time in full-time research.

Future behavioral sciences activities will need to emphasize interdisciplinary programs of relevance to social problems; for example, research training programs in behavioral biology with a major focus on adaptive aspects of behavior from several perspectives—genetic, psycho-

logical, and social. Interdepartmental training models should be encouraged to enable, for example, psychopharmacology centers to cooperate with departments of psychology and psychiatry; brain-behavior sciences programs should include neurobiology, psychobiology, and behavioral genetics.

Interlinked research and training approaches need to focus on the methods and skills essential for creative work at the interface of the biological, psychological, and social sciences. Interaction among behavioral scientists has proved fruitful in, for example, the following mental health fields that have potential applications to community programs: social and behavioral biology, urban anthropology, ecological psychology, and psychosocial epidemiology.

In the face of increasingly aggravated psychological disorders that seem to be related to stresses of rapid social change, the behavioral sciences should be able to improve our knowledge of interpersonal problem solving and intergroup conflict resolution. Basic work in processes of social learning and attitude change is relevant. How does the individual develop into a social being? How does the human organism adapt the environment to itself, in adapting to the environment? We need to know more about socialization after childhood, for social attitudes, beliefs, and values may not be so rigidly preprogramed by early experience as some theories would suggest. We need to know more about the quality of the environments that facilitate individual and institutional adaptive change.

In the examination of the role of the behavioral sciences in Government, a report of an advisory committee to the National Academy of Sciences—National Research Council recommended steps for increasing the use of the knowledge and methods of the behavioral sciences in Government. They emphasize the need for involving behavioral sciences wherever appropriate in program operations, planning, and evaluation. While the intent of the report was to cover the entire Federal establishment, we have tried to show here how one Government agency has been accomplishing the objectives of those recommendations.

Of equal importance is the comprehensive nature of the use of the behavioral sciences in the field of mental health. The full spectrum of behavioral science activities is perhaps best illustrated by noting that NIMH supports basic research in the biochemistry of mechanisms of action in various psychopharmacological drugs, and at the same time is supporting a major campaign of public education on drug abuse, as well as research and training programs in the area of narcotic addiction and drug abuse; and, finally, NIMH is responsible for a national program of treatment and rehabilitation of narcotic addicts.

It is this responsibility, from basic research to treatment and prevention programs in the field of mental health that gives the Institute its singular opportunity to develop and apply the knowledge produced by the behavioral sciences and to use those sciences to assess and ameliorate the complex social problems of today.

Laboratory Evaluation of Aggressive Behavior of the Grasshopper Mouse (Onychomys)

HENRY F. COLE and HAROLD H. WOLF

The effects of tranquilizers and other central nervous system depressants on the aggressive behavior of albino mice have been studied by many investigators. Such investigations reveal that aggressive behavior of most albino mice is mild and relatively unstable. This is not surprising because albino mice have been bred for generations for docility and tolerance to high-population densities.

In view of the docility of albino mice, we felt that an aggressive animal might serve as a more appropriate subject for studies on aggression. One such animal is the northern grasshopper mouse, *Onychomys leucogaster*. These mice are predatory and carnivorous. In their natural habitat, they stalk and kill other small rodents by gnawing into the base of the victim's brain. In the laboratory, the fighting behavior is readily elicited, quite stable, and easily quantified. When given the opportunity, they will quickly and vigorously attack a victim mouse, and they become so adept that the victim is killed as quickly as 20 seconds after its exposure to the aggressor.

The highly stereotyped method of killing, as well as the ease with which the behavior is elicited, even in naive subjects several generations removed from the wild, suggests that this behavior is primarily genetically determined. Members of a second species, *O. torridus*, the southern grasshopper mouse, were also included because we felt valuable behavioral data could be provided by the inclusion of this species.

One method of producing aggressive behavior in albino mice is to subject them to social isolation. Since such isolation-induced aggression has been frequently employed in drug studies, we utilized this method.

The drugs, chlordiazepoxide HCl, chlorpromazine HCl, and sodium pentobarbital, were administered intraperitoneally in aqueous solution in such concentration that 1 ml./100 g. body weight contained the appropriate dose. Dosage and time of peak drug effect were based on a roller-rod test. The time at which the greatest number of mice were unable to remain on the rod for at least 30 seconds in any of three trials was taken as the time of peak drug effect.

Four male and two female adult *leucogaster* and five male and two female adult *torridus* were caged individually and then tested every 2 or 3 days until they would consistently attack a small albino victim mouse introduced into the aggressor's cage for a 5-minute period. Isolation periods as short as 3 or 4 days were usually sufficient to evoke this behavior in *leucogaster*, whereas *torridus* required as much as 2 to 3 weeks of isolation. When attack behavior was consistently displayed, the drug studies were initiated. Mice were randomly assigned to receive each of four treatments (control, chlorpromazine, chlordiazepoxide, pentobarbital), and were injected with the appropriate treatment; at the time of peak drug effect, a small victim albino mouse was placed in the cage for a maximum of 5 minutes. The latency to the first attack by the aggressor and total amount of time in

Condensed with permission from the *Journal of Pharmaceutical Sciences*, 59 (7):969-971, 1970.

aggressive activity were recorded. If a victim was killed before the end of the 5-minute period, the time was noted and the victim was removed immediately.

None of the drugs significantly depressed fighting time in *leucogaster*. Indeed, chlordiazepoxide significantly increased the duration of fighting in this species. The fighting time of *torridus* was also slightly, but significantly, prolonged by this drug, while chlorpromazine significantly decreased the duration of fighting time of *torridus*.

None of the drugs significantly altered the time either species required to kill a victim, but chlorpromazine did significantly increase the latency of *torridus* to attack a victim.

Levels of aggression remained constant over the entire experimental period. Moreover, a given treatment had no appreciable lasting effect on subsequent fighting performance.

Under the conditions employed in these studies, the *torridus* appeared to be somewhat less aggressive than *leucogaster*. In the isolated subjects, *torridus* displayed longer latencies to attack, shorter fighting times, and made fewer kills than did *leucogaster*. Studies have not provided an explanation for the quantitative discrepancy in aggression exhibited by the two species of *Onychomys*, and we are unaware of any studies comparing the aggressive behavior of these two mice either in the laboratory or the field. Nevertheless, both species of *Onychomys*, especially when isolated, were found to display a markedly greater degree of aggressive behavior than would albino subjects under similar conditions.

Chlorpromazine has been shown to depress the isolation-induced aggressive behavior of albino mice in small, nontoxic doses. In contrast, a dose of chlorpromazine as large as one-half TD_{50} was ineffective in suppressing the isolation-induced aggressive behavior of *leucogaster*. Although the less aggressive *torridus* did respond to chlorpromazine, this effect might be partially due to a nonselective depression of the central nervous system, since at this dose the animals appeared to be somewhat sedated.

Chlordiazepoxide has been reported to possess unique taming properties and to be effective in calming aggressive or vicious albino mice and rats, dogs, cats, and monkeys. In both *leucogaster* and *torridus*, a much higher dose of CDP was not only ineffective in suppressing aggression, but significantly increased the amount of time the aggressor spent engaged in fighting activities.

Pentobarbital was not found to alter significantly the aggressive behavior of either species of *Onychomys*. Similarly, this nonselective central depressant is ineffective in altering the aggressive behavior of albino mice except in severely debilitating doses.

Onychomys are predatory rodents. In their natural habitat, survival probably depends on the ability of these mice to track and kill victims for food. The results reported here demonstrate how markedly the aggression of albino subjects differs from that of *Onychomys*. The relatively mild, difficult to elicit, and unstable aggressive behavior of albino subjects contrasts sharply with the genetically predisposed, predatory nature of *Onychomys*. Thus, the results support and extend the contention that the genetic predisposition underlying an animal's behavior may qualitatively and quantitatively influence the results obtained in pharmacological and behavioral investigations and must not be ignored.

Interanimal "Memory" Transfer: Results from Brain and Liver Homogenates

Bonnie Frank, Donald G. Stein, and Jeffrey Rosen

It has been found that RNA extracts from the brains of trained donors and injected into naive recipients facilitated performance. In attempts to replicate these results, there have been successes and failures. The discrepancy may involve the type of task used; "successes" have frequently employed passive avoidance tasks, and "failures" generally employed positive reinforcement situations. In the avoidance task, an increase in latency of recipients when compared with those of donors is taken as evidence of interanimal memory transfer. Such changes in latency could be the result of performance variables unrelated to learning, such as increased emotionality, fatigue, or stressful side effects of the experimental procedure. Our experiments were designed to contrast the hypothesis that memory can be transferred from a trained to an untrained animal, with the hypothesis that "apparent" interanimal transfer in an aversive situation is mediated by nonspecific stress substances.

The subjects were 180 male albino mice, divided into three groups, each comprised of 20 donors and 40 recipients. Each donor was randomly assigned to two recipients, one for brain homogenate and one for liver homogenate. The liver injection provided high concentrations of nonspecific RNA, and controlled for volume of foreign matter injected into the intraperitoneal cavity.

The apparatus was a rectangular box, one half of which was painted white and the other black, with the sections separated by a partition. The floor consisted of a grid of brass rods. The dependent variable for the donors was the number of seconds the subjects took to enter the black section from the white section through an opening in the partition.

The shock-group donors received 5 seconds of scrambled shock after entry into the black section. The procedure for donors in the no-shock group was identical to that of shocked donors except that the former were not shocked. The stressed, control donors were placed in a ventilated glass jar and rolled back and forth five times.

Immediately following these procedures each donor was decapitated, and the brain and liver removed, weighed, and individually homogenized. The entire liver was used, whereas the brain preparation did not include the olfactory bulbs and cranial nerves. A single injection of either brain or liver substance was given intraperitoneally in the upper left abdominal area of the appropriate recipient, who was lightly anesthetized with ether.

Injected recipients walked with difficulty and seemed lethargic for up to 2 hours. After 3 hours, normal home cage activity resumed. Therefore, each recipient was tested 6 hours after injection to permit unequivocal recuperation from any temporary disabling effects of the injections. Recipient testing was identical to that for the donors, except that no shock was administered upon entry into the black section. All testing was done by an experimenter who was naive as to which recipients had

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been given brain homogenate and which had been given liver.

We found longer latencies in subjects receiving homogenates from the shocked and stressed donors than in subjects receiving homogenate from the nonshocked donors, and longer latencies in the recipients of homogenates from donors in the nonspecific stress group than in recipients of homogenates from shocked donors.

The data from the groups that received brain homogenate from shocked and unshocked donors, respectively, could be interpreted as supporting the hypothesis that a specific memory is transferrable from trained donors to naive recipients. Subjects receiving brain homogenates from donors who were shocked in the testing apparatus remained outside the black section longer than subjects receiving brain homogenates from nonshocked donors. But when data from recipients of homogenates from the nonspecific stress group are considered, our results suggest that the increased latencies in recipients of homogenates from trained subjects cannot be explained by the memory transfer hypothesis. This occurrence is understandable as a result of transfer of an as yet unidentified stress substance affecting general activity.

As testing proceeded, we noticed that some recipients were slower than their donors, while others had latencies almost identical to those observed in the donors. Because of this variance, we decided to determine whether "fast" or "slow" subjects were differentially affected by the treatments. Subjects whose latencies were above the median of their group were called "slow," and those below, "fast." Of the mice whose latencies were above the median, those receiving brain homogenate from the shocked donors had significantly longer latencies than recipients of brain homogenate from unshocked mice. The mice receiving homogenates from stressed donors had longer latencies than those receiving from no-shock donors. In the below-median latency groups, the recipients from stressed mice took significantly longer to enter the dark side of the box than recipients from shocked mice, given either brain or liver homogenates.

The individual differences in recipient latencies and the stressful nature of the situation suggested that there might be an interaction between emotionality and memory transfer in the cases of similar scores for the donor and recipient. This interference could result from injecting substance from highly emotional donors into nonemotional recipients, and from nonemotional donors into emotional recipients. Because of the possibility of this interaction, we performed a second experiment. Mice were pretested on two independent measures of emotionality with the intention of creating groups consisting of three emotionally similar animals, one donor and two recipients.

The subjects were 180 male albino mice assigned to three groups described in the first experiment. Two tasks were used to match triad members. The apparatus consisted of a straight alley and an open field maze. The first was painted a medium gray and had a free-flowing water spout at one end. The open field maze was demarcated into 36 squares. For the 2nd through 5th days following arrival in the laboratory, the mice were placed on a 23-hour 45-minute water-deprivation schedule, and received water only in the straight alley. On the 6th day, each was allowed to run to water ten times. A mean of the latencies for these trials was recorded. Approximately 3 hours after testing in the straight alley, each

mouse was permitted 3 minutes of exploration in the open field maze. A count was made of the squares traversed during that time.

The mean latencies and the open field scores constituted the measures according to which the members of each triad were selected. Within each triad, the difference between the shortest and longest mean latencies was limited to 1.5 seconds and the difference between the lowest and highest open field scores was limited to 25 squares. The training, injection, and test and data-analysis procedures were identical to those in the first experiment. Analysis of the data revealed a significant difference between subjects receiving brain injections and liver injections. For the brain recipients, the longest latencies were found in recipients from the nonspecific stress donors, the shortest, in recipients from the no-shock donors, and those in recipients from the shocked donors were intermediary. For the liver recipients, the latencies in recipients from no-shock donors were the shortest, and the latencies in recipients from stressed and shocked donors, respectively, were virtually the same. Within each treatment group, the liver recipients had significantly longer latencies than their respective brain-recipient counterparts.

Of the brain recipients with above-median scores, recipients from shocked and stressed donors, respectively, had significantly longer latencies than recipients from the no-shock donors. Similar findings were obtained for the liver recipients.

Of the recipients with below-median latencies, there were four significant differences. For brain recipients from shocked and stressed donors, respectively, the latencies were longer than those of recipients from unshocked donors. For the subjects receiving the liver homogenate, recipients from shocked donors had longer latencies than recipients from the no-shock donors and recipients from the stressed donors.

The results indicate that support for the hypothesis of specific memory transfer may require further study with controls for stress-related substances. Although we obtained increased latencies in subjects receiving homogenates from the shocked donors, we observed even greater increases in the recipients from the nonspecific stress donors; increased latencies were observed for all recipient groups, regardless of whether the homogenate injected was from brain or liver. One could ask if two independent agents are active in producing the observed effect, a specific memory substance in the brain, and some hormonal stress element in the liver. This possibility is negated by our finding that increases in latency occurred with injections of brain homogenate taken from subjects given the nonspecific stress treatment.

What alternative explanation would provide better understanding of this phenomenon? A general stress factor may be responsible. It also seems necessary to take into consideration individual differences in emotional reactivity. Future studies of interanimal transfer should consider the prominent role of emotionality and arousal in determining recipient behavior. Finding pretests capable of designating a well-defined range of emotional types is of primary importance.

An Associate of Arts Program for Training Mental Health Associates

SHABSE H. KURLAND

Much has been written about the shortage of manpower in the mental health field. Less attention has been paid to the problem of the relationship between training for a profession and the specific skills needed in that profession. It might be that training methods can be reorganized so that more people can be trained without increasing the number of professionals to do the training, and it might be demonstrated that many jobs can be done without high-level graduate training. The 4-year college and the 2-year community colleges are the two institutions which could provide the framework for new training programs which are traditionally available at the graduate level. The community college is the one more closely amenable to innovative programs.

Catonsville Community College, along with Community College of Baltimore and about 10 others, began programs in 1967. It might be useful to outline some of the prerequisites which must precede the establishment of a program once the college decides it wants to do so. Students cannot be expected to enter a new program unless there is assurance that they will be employed when they graduate. Thus there had to be collaborative effort between the mental health community and the college. As a result of such efforts by the Maryland Department of Mental Hygiene, the State Civil Service Commission created a position called "mental health associate" for graduates of a 2-year program with a salary scale of $6,459 to $8,487. There was also understanding that the Department of Mental Hygiene would employ these graduates and would cooperate in providing practicum facilities. Exploratory surveys indicated that other agencies such as the schools, welfare departments, etc. would be interested.

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Program and Goals

Students are enrolled for the associate of arts degree and must meet the regular college requirements for graduation. Other required courses include general psychology, abnormal psychology, introduction to sociology, and problems of children and adolescents. In addition there are four mental health courses which must be taken consecutively, and a course in group dynamics, taken during the second semester. The first mental health course discusses behavior—using a psychosocial frame of reference with emphasis on operant principles. In addition to 3 hours of lecture there is a practicum during which the student carries out a behavior modification project with a patient in a mental hospital.

The second mental health course is devoted to interviewing. The goal is to help the student provide a high level of facilitating conditions in his interviewing activities. This is done by having students interview each other. These recorded interviews are discussed response by response in small groups. After a minimal level of skill has been reached, the student begins to work with patients and the taped interviews are again discussed. The student also spends 6 hours a week in a mental health facility engaging in a variety of activities.

The group dynamics course is designed as an opportunity for the student to learn about himself and his interacting with others.

The third and fourth courses include 4 hours of lectures and 12 hours of practicum each semester. The lectures continue with the development of interviewing skills along with the introduction of other ideas that will help the student to deal effectively with clients.

In the practicum for the second year the student is given increasing responsibilities in a mental health setting. He might be assigned to a mental hospital, public school system, mental health outpatient clinic, or pediatric center. The students engage in individual and group therapy in all the settings and engage in some activity specific to one agency. They might be involved in a token economy ward in a hospital, engage in individualized behavior modification projects with specific patients, run ward meetings, etc. In the school they are providing what might be called a crisis-intervention service, providing short-term counseling to children who are presenting difficulties to the teacher. Students might also make home visits, interview families, engage in milieu therapy, etc. All activities are supervised by agency staff and weekly reports are required from the students and are reviewed by the instructor.

Organization of Courses

The rationale has been to emphasize development of skills to be used on the job and to introduce theoretical notions only when necessary to learn how to make decisions which might be required on the job. The second emphasis has been to provide opportunity to apply these skills and knowledge in the clinical situation.

The skills which the mental health technician should have at the end of the program might be conceptualized as follows: ability to see relationship between behavior and consequences which maintain this behavior, with some understanding of how to respond so as to increase or decrease the strength of the behavior; ability to respond to patients or clients in a way which will facilitate positive progress —ability to be empathic, genuine, and warm; ability to understand what other professionals are talking about; ability to communicate knowledge about behavior to patients, staff, and others; ability to relate to people—in a professional and mature fashion; ability to deal with a variety of institutional settings so that a minimum of frustration and feelings of hopelessness and helplessness will be experienced; ability to tolerate role ambiguity and professional rivalry.

The Generalist Approach

The philosophy has been to train the individual with general and broad skills. This means that the associate, if employed in a specialized role, will require more specific inservice training before he can be utilized maximally. It also means, that he will be able to fit into a large variety of agencies and be able to be utilized in more innovative and uncharted roles than are known now.

Another aspect of the philosophy is that a large part of the know-how which the mental health associate brings to the job resides in intangible assets such as attitudes and perceptual frames of reference. How much of these can be developed during training and how much should be within the individual before he is admitted to the program is subject to investigation. There is evidence suggesting that it can be learned given appropriate opportunities.

The mental health associate, having developed some ability to provide empathy, genuineness, and warmth in

human relationships, could engage in individual or group therapy. He should be able to engage in information-gathering interviews with patients, relatives, or other individuals in the community. With the same skills and with the experience and knowledge acquired during the program, the associate could engage in group interaction techniques such as social interaction, milieu therapy, rehabilitative or activity therapy (occupational, recreational), and the like, and also the more nonstructured relating to patients in a ward or group setting. Another area is in the application of behavioral modification techniques in schools, hospitals, and clinics. Another broad role would be the consultative or educational function where the goal might be to work with individuals in the community, attempting to inform, consult, and change attitudes related to effective behavioral functioning.

While this covers the whole gamut of activities which the highly trained professional performs, there is evidence that individuals with less training can do a creditable job. This would then free the higher level people to devote their time to supervision, training, research, and program innovation, and for service in those functions for which experience indicates that broader level of knowledge and expertise is required.

Job Specifications

The precise job specification for mental health associates cannot and should not be delineated at the present time. The responsibility for the staff supervising the practicum is to work with the agencies in exploring possible job roles for the students. With a continuing evaluation of the projects, one should be in a better position to modify or expand these projects as part of the ongoing activities in the agencies.

Students

No selection procedures were used. The student did not have to indicate an interest in continuing with the entire curriculum to take the first course. Students were accepted on a part-time as well as full-time basis. In the 1967 fall semester, 41 students began the first mental health course. Thirty-six completed the course. Twenty-three students completed the four mental health courses, 18 of whom were awarded the AA degree. Of the 18 graduates, 11 are working full time, two part time, and one is looking for a part-time position.

At the beginning of the semester a battery of psychological tests was administered, so that we might have some description of the students, how they change, and, if possible, the material to do a retrospective study determining the feasibility of using the tests for predictive and counseling purposes. The tests indicate that this self-selected group of students is relatively normal in personality and value patterns, and has interests and attitudes which would indicate compatibility with working with psychologically troubled persons.

In a new program evaluation is crucial so that the course and practicum do not become fixed. Informal feedback from students and from practicum agencies is used. A more formal evaluation is being conducted on the acquisition of interviewing skills. It will be possible to evaluate the students' progress during the program and compare their final interviews with those of experienced and more traditionally trained professionals. Changes in the psychological tests will be utilized to evaluate changes in students' attitudes and opinions thought to have relevance in working with people. Additional measures will be used as they can be developed.

An "Overstatement" on Psychological Research: What is a Dissertation?

WILLIAM S. VERPLANCK

The face, the form, the content, of psychology as a science and as a profession are changing rapidly. We are passing though a period when irreversible developments are occurring that will alter the activities of many of us. This is long overdue.

The puny achievements of psychology indicate that something has been wrong. We have generated almost nothing by way of stable basic principles, beyond the primitives of contiguity and reinforcement, although some are so vague as to be all but inapplicable to the specific cases. There is stupendous volume of experimental literature, much of it relevant to physiology or to the technical achievements of the physical sciences. But not to behavior, to teaching children, to aiding others, even to speeding the "recovery of the patient."

Why? Here's one man's opinion: Psychology has never been a science in its own right. It has borrowed uncritically the concepts of other sciences, and their experimental and research methodologies. We have bypassed the critical first-stage in the development of every science—observation and description. The period which in chemistry overlapped with alchemy and in astronomy with astrology. The period when, in biology and geology, expeditions moved over the face of the globe, and scientists dedicated themselves to painstaking gathering, description, and classification. In the scientific literature of these fields, hundreds upon thousands of dissertations consist of the data yielded by gathering, describing, and classifying natural phenomena—flowers, rocks, insects, tribes, ruins.

It is about time we considered the possibility that we need to start over again—or at least some of us do. It's about time more of us started on the job of developing a descriptive methodology, the job of recognizing that observing and reporting upon the functioning of an individual, of individuals in a group, of groups, constitute *research* and yield scientific data and statements. No "experimental design." No "independent variables." Not even any "controls," in any conventional sense. If an experiment, then a simple-minded one, with minimal assumptions, statistical or otherwise.

The research most desperately needed now is descriptive research. Research that generates hard, indisputable, unambiguous statements, or numbers, or television tapes. This, I think, is what we mean by facts. Their *generality,* that is, the relationship of a new set of facts to other already established facts, will need to be demonstrated. How generality can, and should, and will be established, will depend in each instance, on the specifics of the observations.

Observational and descriptive research is not solely "acceptable"—it is indispensable. Let's have innovative research. Dissertations on what people do, and say, and think in this real world, and not solely in the 8×8 soundproof cubicle or on the answer sheet for the set of questions.

Let's work towards developing methods that will enable the "new" to stand as respectable, and as valued as the "old" which will continue.

Condensed with permission from *Psychological Record,* 20(1):119–122, 1970.

Mental Health News Digests

National Clearinghoue for Drug Abuse Information

The recently created National Clearinghouse for Drug Abuse Information is now providing information on drug abuse and drug abuse programs across the country. The Clearinghouse, operated by the Department of Health, Education, and Welfare's National Institute of Mental Health, serves as the Federal focal point for drug abuse information.

Twenty-four hour telephone service (301–496–7171) is one of the features of the Clearinghouse.

The Clearinghouse offers a selection of publications, provides referral services and the storage and retrieval of computerized data on drug programs.

Publications on drug abuse produced by Government agencies are available from the Clearinghouse on request. The first publication to be widely distributed is "Federal Source Book: Answers to the Most Frequently Asked Questions about Drug Abuse," produced cooperatively by Federal agencies concerned with drug abuse problems.

Film catalogs, bibliographies, and curriculum guides also will be available through the Clearinghouse.

Scientific, technical, and other specialized inquiries are being referred to the appropriate government agency for reply, and to private sources of information such as the National Coordinating Council for Drug Abuse Education and Information.

Data on films, publications, educational curricula and programs, local and State drug abuse programs, and private agencies concerned with education and rehabilitation are being entered into a computer data bank, and will be retrieved on demand. These resources will be made available to educators and other professional personnel concerned with establishing and maintaining drug abuse prevention and treatment programs.

Inquiries in any area of drug abuse should be sent to the National Clearinghouse for Drug Abuse Information, Box 1701, Washington, D.C. 20013. Requests for literature should be sent to "Publications," and requests for other services should be sent to "Information Services."

News from the World Federation for Mental Health

The latest in a series of WFMH-sponsored workshops was held last Spring in Singapore. Organized by the Singapore Assocation for Mental Health, it actually took on the character of an international conference in which some 50 participants from 14 other countries met with about 130 local participants. One interesting session was devoted to Malay "Bomohs," or spirit-exorcists, and other types of indigeneous healers. As in a previous workshop in East Africa, it was accepted that many patients, especially those in remote areas, have almost no alternative than to rely on magical aid, and that it is better not to disturb their faith in such healers. Opinions were divided as to whether mental health workers should try to work with Bomohs; perhaps the most telling argument against doing so was the rather low status which psychiatry holds in this part of the world, and if psychiatrists seemed to be working with village Bomohs, it could be damaging to their "image" in the eyes of professional colleagues.

The annual meeting of the Federation was held in Jerusalem in August

1970. The Federation is an international nongovernment organization, with membership open to both organizations and individuals. A quarterly newsletter is published in English and French. The Secretariat is located at the Royal Edinburgh Hospital, Morningside Park, Edinburgh, EH10, 5HF, U.K.

National Association of School Psychologists

The National Association of School Psychologists has been in existence for about a year and a half. The Association is composed of persons who are "currently functioning as school psychologists, trained as school psychologists, but currently functioning as consultants or supervisors in psychological services, primarily engaged in the training of school psychologists at a college or university, certified as school psychologists under the laws of a State, or students in school psychology training programs." A newletter is being published, and it is envisioned that a national office will be opened sometime in the future. The Executive Secretary is Dr. William H. Farling, Director of the School Psychology Training Program, University of Akron, Akron, Ohio 44302. (From *Professional Psychology,* Winter 1970)

American Association of Psychiatric Services for Children

The American Association of Psychiatric Services for Children is the new name of the organization formerly called the American Association of Psychiatric Clinics for Children. The purposes of the Association are to conduct the following activities in mental health for children (including adolescents) in the U.S., its territories, and the Dominion of Canada:

To provide a national focus for the clinical point of view, and to represent this perspective in those areas, both professional and public, which bear upon the intellectual, emotional, and social development of children.

To foster the coordination of mental health services for children.

To help maintain and further standards of clinical practice.

To foster the intellectual, emotional, and social development of children.

To foster the prevention and amelioration of mental and emotional disorders of children.

To further responsible development and innovation in the clinical field and in the application of clinical knowledge.

To promote the highest quality of training of clinical personnel and such other personnel as will enhance the services provided to children.

To promote research and the development of knowledge.

To provide a forum for the exchange of ideas.

To foster the recruitment and development of manpower.

To facilitate the recruitment and placement of professional personnel.

The Association has also added two new membership categories—Affiliate Member and Member-at-Large. For information about membership, write to the Association at 250 West 57th St., New York, N.Y. 10019.

Insurance and Psychiatric Care

The American Psychiatric Association is studying the effect of insurance plans on psychiatric care, under a 1-year grant from the National Institute of Mental Health. Specifically the project will:

Analyze published and unpublished data from such sources as the Federal Employees Health Benefits Program, CHAMPUS, Blue Cross, Blue Shield, commercial health insurance carriers, prepaid group practice plans, and management and union plans;

Study the impact of health insurance plans on the financing of psychiatric services. Special attention will be paid to the use of insurance to support community mental health centers after termination of Federal staffing grants;

Study the extent to which insurance can help finance services for children.

The project will result in general recommendations on planning for health insurance. Publication of a monograph is anticipated. (From *Psychiatric News,* July 15, 1970).

Teaching Psychology and Behavioral Science

The American Psychological Association has started a clearinghouse for information on teaching psychology and the behavioral sciences at the elementary and secondary school levels. A newsletter for psychology teachers is planned. Information about the clearinghouse may be obtained from Margo Johnson, American Psychological Association, 1200 17th St. N.W., Washington, D.C. 20036.

Drug Abuse as a Business Problem

During the past few years drug abuse has become almost as serious a problem as alcoholism for business and industry. The New York Chamber of Commerce has recently published a booklet that attempts "to define the problem, tell how a number of companies are facing up to it, point up some of the specific difficulties it carries with it, and give realistic suggestions as to how any firm should go about developing its own workable policies on drug abuse." Although the book is intended primarily for businesses in the New York area, it should be useful elsewhere. It was researched and written by Carol Kurtis of the Research Institute of America, and may be obtained for $2.00 from the New York Chamber of Commerce, 65 Liberty St., New York, N.Y. 10005.

Family Planning and Abortion

This monograph provides a detailed overview of family planning and abortion policies and practices in the Soviet Union, Bulgaria, Poland, Hungary, Romania, Czechoslovakia, Yugoslavia, German Democratic Republic, and Albania. Prepared by Dr. Henry P. David of the America Institutes for Research, *Family Planning and Abortion in the Socialist Countries of Central and Eastern Europe—A Compendium of Observations and Readings* is available gratis, as long as the supply lasts, from the Population Council, 245 Park Ave., New York, N.Y. 10017.

New Journals

The *Journal of Cross-Cultural Psychology* is a new international and interdisciplinary publication devoted to cross-cultural social and behavioral research. It will include original comparative, correlational, and experimental research, as well as critical and theoretical papers. The international editorial board is made up of 35 members representing psychology, anthropology, sociology, psychiatry, psycho-linguistics, political science, business, and management. Editor-in-Chief is Walter J. Lonner of Western Washington State College, and the publisher is the Center for Cross-Cultural Research, Department of Psychology, Western Washington State College, Bellingham, Washington 98225.

Urban and Social Change is a semi-annual publication published by the Institute of Human Sciences at Boston College. It features interdisciplinary articles reviewing research and theory and encourages dialogue between urban scientists and practitioners.

recent nimh publications

Single copies of these publications may be obtained from the Office of Communications, National Institute of Mental Health, LL02, 5454 Wisconsin Ave., Chevy Chase, Maryland 20015. A complete list of all publications available from the NIMH may also be obtained from the Office of Communications. If a price is given, the publication may be ordered in quantity from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Enclose a check or money order payable to the Superintendent of Documents.

Mental Health Benefits of Medicare and Medicaid. This 24-page pamphlet is a summary of the substance and implications of Medicare and Medicaid as they relate specifically to benefits for psychiatric care. Public Health Service Publication No. 1505.

Coping and Adaptation. This Behavioral Sciences Bibliography was developed by behavioral scientists at NIMH and Stanford University in preparation for the Conference on Coping and Adaptation held at Palo Alto, California, March 20 to 22, 1969. It emphasizes readily accessible articles and monographs published through 1967. Public Health Service Publication No. 2087. $1.75.

Drug Dependence, March and June 1970. The purpose of *Drug Dependence* is to facilitate the dissemination and exchange of information in the field of drug dependence and abuse and to provide abstracts of the current literature in that general field. .50¢ per issue.

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